CHAPTER III

RESEARCH METHODOLOGY

This chapter explained about research methodology to answer the problem of this research consists of Research Design, Population, Sample, Sampling, Variable of the Study, Techniques of Collecting Data and Research Instrument, Hypothesis Testing, Validity Testing, Reliability Testing, Item Discrimination Testing and Item Facility Testing.

A. Research Design

This research was conducted in correlational research design by using a quantitative approach. Muijs (2004: 1) states quantitative research is describing phenomena that are analyzed using data in the form of numbers. It can be interpreted that quantitative research is research that can be analyzed by using a number of data. Johnson and Christensen (2014: 20) defines quantitative research is the research that focuses on testing theory and hypotheses using quantitative data. It can be concluded that quantitative research is research that is focused on the theory and hypothesis by using quantitative data.

Donald, et al (2006: 351) stated that correlational research methods are used to determine the relationship between variables. It can be interpreted that correlation research design is research design that show relationship among two or another variables. Johnson and Christensen (2014: 52) define correlation research is research that does not do experiments and uses

quantitative data. Nurhayati (2020) states correlation research is a research design non-experimental that helps the researcher founds the relationships between some variable. The researcher concluded correlation research design is study does not any treatment and uses the quantitative data.

The specificity of quantitative research is numerical data. The reason for choosing the correlational research because the researcher needs to distinguish strong point of two or another variable according reaction of two or another variable according correlation skill. In quantitative research there is no treatment. This research, the researcher needs to get the correlation among some variables.

B. Research Setting

1. Place

   In this study, the researcher was taken at MTs Sunan Kalijogo Mojo Kediri that is located in Jl. Raya Kranding Mojo Kediri, Tamansari, Kranding, Mojo, Kediri, East Java.

2. Time

   The research was managed from November 2020 to March 2021. The researcher conducted the research on 28 November 2020.

3. Vision and Mission

   a. Vision

      Terwujudnya insan ber-IMTAQ, unggul dalam IPTEK, kreatif, inovatif dan cinta lingkungan.

b. Mission

1) Menerapkan syari'at agama yang berfaham Ahlus Sunah wal Jama'ah dalam kehidupan sehari-hari.
2) Menerapkan budaya belajar yang religious, disiplin, tekun dan berkepribadian luhur.
3) Meningkatkan mutu pembelajaran dengan semangat inovatif, kompetitif dan berprestasi.
4) Mengembangkan teknologi informasi dan komunikasi dalam pembelajaran dan administrasi.
5) Meningkatkan profesionalisme tenaga pendidik dan kependidikan sebagai upaya peningkatan mutu layanan dan lulusan.
6) Menumbuhkan rasa cinta terhadap pelestarian lingkungan, mencegah dan menanggulangi kerusakan serta pencemaran lingkungan hidup.

Based on the vision and mission above, the researcher focused on the vision is unggul dalam IPTEK. The researcher chose the online to conduct the data because the condition is to require the school to do online learning. In the mission, the researcher focuses on the missions are meningkatkan mutu pembelajaran dengan semangat, inovatif, kompetitif, berprestasi, and mengembangkan teknologi informasi dan komunikasi dalam pembelajaran dan administrasi. The researcher chose this mission because the researcher wants the students have more enthusiasm in learning and develop the technology.

C. Population, Sampling and Sample

Population, sample, sampling were very important in this research because without all of them, this research couldn't be conducted.

1. Population

Surahman, et al (2016:8) stated that the population is the whole of something whose characteristics are being studied. Johnson and Christensen (2014: 301) stated population is the large group that the researchers want to generalize about their sample group results. Neuman (2014: 247) defines population is a large unit that the researcher draws a sample and the results from the sample have been generalized. Can be interpreted population is a large categorize to be studied but only taken employing a sample selection method.

In this research, the population this study is second grade students at MTs Sunan Kalijogo Mojo Kediri in academic year 2020/2021. The total of 451 students was divided into 12 classes. There are from VIII-A, VIII-B, VIII-C, VIII-D, VIII-E, VIII-F, VIII-G, VIII-H, VIII-I, VIII-J, VIII-K, and VIII-L.

2. Sampling

Johnson and Christensen (2014: 298) define sampling is the procedure of taking from a population to be studied. Sampling is a technique used in sampling that provides an opportunity for each student of the population to be selected. This study, researcher applied purposive sampling. Surahman, et al (2016:8) stated purposive sampling is sampling

technique that is done on the basis of the consideration of the researcher alone who considers the desired elements already in the sample taken. It can be concluded that purposive sampling is sampling based on characteristic that are in accordance with the objectives that have been determined by the teacher.

This research uses a non-random sampling technique because not all samples in the population have the same possibility of being chosen as a sample. Purposive sampling is also often associated with the research objectives to be conducted through the researcher. Researcher selects class according to class teacher. Based teacher's opinion, the researcher knew the abilities those students have of the VIII-C class. So, the class teacher had given the class of VIII-C to do this research.

3. Sample

Johnson and Christensen (2014: 300) defined sample is categorize of component come beginning bigger populace based on specific rules. Sample is little part the populace. Surahman, et al (2016:8) stated the sample is portion the population is the object of study. Neuman (2014: 246) states that a sample is a small part selected by a researcher as a large set generalized to the population. It means that a sample is always smaller than the population. This research, researcher selected the population as sample. Researcher selected forty learners in the class of VIII-C in the second grade students of MTs Sunan Kalijogo Mojo Kediri.

D. Variable of the Study

Surahman, et al (2016: 8) defined a variable is everything that will become an object research observation, in which there are elements that show in events to be investigated. It can be interpreted that variable is something that will be studied and has an important role in a study. Variable always exists in every study. In this research, the researcher used three variables. These are vocabulary mastery, learning motivation and reading comprehension. Two variables are predictors variable (X) and one variable is a criterion variable.

1. Predictors Variable (X)

Donald et al (2006: 37) stated independent variables are variable precedes dependent variable and affect dependent variable, which the result. It can be interpreted that independent variable is variable which affect dependent variable in a study. In this study, there were two independent variables. The first variable is Vocabulary Mastery of the second grade students of MTs Sunan Kalijogo Mojo Kediri (X_1) and the second variable is Learning Motivation of the second grade student MTs Sunan Kalijogo Mojo Kediri (X_2).

2. Criterion Variable (Y)

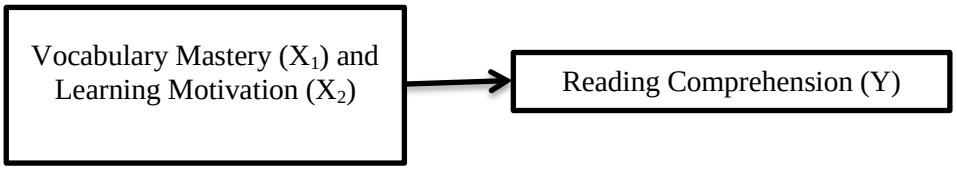
The dependent is a variable determines type variable that affects independent variable. In other words, dependent variable has an effect if there is a relationship with the independent variable. This study, the

dependent variable was Reading Comprehension of the second grade students of MTs Sunan Kalijogo Mojo Kediri (Y).

The correlation among three variables can be gotten follow:

Figure 3.1

The Correlation between Vocabulary Mastery, Learning Motivation toward Reading Comprehension



E. Data

Data in this study was result of students' reading comprehension, students' vocabulary mastery and learning motivation test. Data was chosen through sharing questionnaire of motivation in learning English, taking vocabulary test and taking reading comprehension test. Adding, data were treated through non-parametric study by Spearman Rho. The researcher costoms purposive sampling get data. Purposive sampling is sampling technique that is done on the principle of taking into consideration the desired elements already in the sample taken.

F. Techniques of Collecting Data

In this study, researcher spends a test and questionnaire technique get data in this study. Questionnaire is list questions that are assumed several persons to get answers. Other words, questionnaire is set questions in the form of a determining instrument used to get information from respondents.

The test was used to calculate a student's vocabulary mastery and reading comprehension. However the questionnaire spent to get data around the student's Learning Motivation.

1. Instrument of Collecting Data

    a) Scale for Motivation

        This study, questionnaire is spent see is learners hold learning motivation or not. Johnson and Christensen (2014: 271) stated the questionnaire is an instrument for collecting self-report data that is filled out by participants in a study. Nurhayati (2020) states that one step online school as a real effort and form responsibility for orders from government programs in overcoming the pandemic *Covid-19*.

        The learners should response questions given through contributing a checklist in response column in *Google Form application*. The students must choose the answers that are experienced by them. Nurhayati (2019) states practical value in the teaching and learning activity is learning to use technology, especially to support government programs and policies related to information and communication technology. In this study, researcher applied a closed-ended question. Closed-ended questions are questions that ask participants to choose answers that have previously determined by the researcher.

        The scoring instrument of questionnaire in this study is according to Likert Scale Rating. Johnson and Christensen (2014: 247)

defined likert scale rating is the most frequently applied procedure for the measurement of abstract constructs. It can be interpreted that likert scale rating is procedures that are often used in measuring a questionnaire. The score scale from 1 to 5 can be gotten in Table 3.1:

Tabel 3.1

The Way to Score the Questionnaire

Statement	Option				
	SS	S	TB	TS	STS
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Surahman, et al: 112

In which:

SS : Sangat Setuju

S : Setuju

TP : Tidak Berpendapat

TS : Tidak Setuju

STS : Sangat Tidak Setuju

The type of questionnaire is a close-ended questionnaire type of multiple choices with determinant choice. The questionnaire consists of 20 items that must be answered by the students. The highest score in the questionnaire's question is 100. While, the smallest score in the questionnaire's question is 20. Learning motivation consists of six indicators. Those are knowledge needs, manipulation needs, activity needs, exploration needs, simulation needs and ego

enhancement needs. The ordinal scale was used to calculate the learning motivation test.

b) Test of Vocabulary Mastery

Johnson and Christensen (2014: 270) state tests is an instrument usually used in quantitative research to measure the attitudes, personality, aptitude, self-perceptions and performance of participants in the research. It can be interpreted that test is an instrument used in research to get the value of studnts' abilities in a skill.

In this research, the test an objective test in system of multiple-choice type. Tests contain 20 questions. Scoring technique for test is they will be scored 5 if the students answer the question correctly and they will be 0 if students answer it correctly. So, high achieve was 100 when students answer all of these questions correctly. Ordinal scale was applied to determine vocabulary mastery test.

c) Test of Reading Comprehension

Johnson and Christensen (2014: 270) mention tests is an instrument usually used in quantitative research to measure the attitudes, personality, aptitude, self-perceptions and performance of participants in the research. Can be concluded test is an instrument used in research to get the value of studnts' abilities in a skill.

In this study, test is real test in type of multiple-choice types. Test contain of 20 questions. Scoring technique for test is they will be

scored 5 if the students answer the question correctly and they will be 0 if students answer it correctly. So, high achieve was 100 when students answer all of these questions accurately. Ordinal scale was applied to determine reading comprehension test.

2. Try Out of the Instrument

a) Validity of the Instrument

Donald et al (2006: 226) state validity is the process of gathering the proof to support a certain clarification of test scores. Muijs (2004: 66) defines validity is very important aspect in measuring instruments in educational research. It can be interreted validity is process of determining instruments in a research before being tested on a sample.

In this study, researcher applied *SPSS 23.0* on finding Spearman Rho. Donald, et al (2006: 354) defined Spearman Rho is the correlation coefficient with the ordinal scale that used when the data is ranked. The criteria in the validity the test were named valid when r-obtained is upper than r-table, and it is not valid when r-obtained is smaller than r-table.

In this research, any 20 questions reading comprehension that were tested on the students, any 20 questions vocabulary mastery that were tested on the students and any 20 quateions learning motivation that were tested on the student.

b) Reliability of the Instrument

Donald et al (2006: 236) defined reliability determining instrument is level constancy of those determing everything is being measured. Muijs (2004: 71) states that reliability is an element that can determine the quality measuring instrument. Criteria reliability can be calculated appliying contrast among standards correlation coefficient. The conclusion reliability is an element used determine the quality of measuring instruments.

Muijs (2004: 142) defines correlation coefficient is the method to examine the relationship between two continuous variables. Johnson and Christensen (2014) state correlation coefficient is statistical value performances depth of the correlation among two variables. It can conclude that correlation coefficient statistical value performances depth and correlation among two variables.

Value correlation coefficient is greater than value of t-table, indicated the instrument used is consistent, whereas value correlation coefficient is lower than value of t-table, indicate the instrument used is not consistent. Researcher applied *SPSS 23.0*.

G. Method of Data Analysis

Sandu & Ali (2015: 90) mention that data analysis is a progression of activities of analyzing the systematization of the clarification and confirmation of data so that a event has social academic and scientific value. In this research, the researcher used some technique of data analysis, it is as follows:

1. Instrument test:

Before the questions are tested to the students, the test questions were through the testing process first, namely as follows:

a. Validity Test

Expert validity is validity performed by a predetermined expert to calculate the validity of each item in this below:

$$r_{XY} = \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Explanation:

N : Amount data

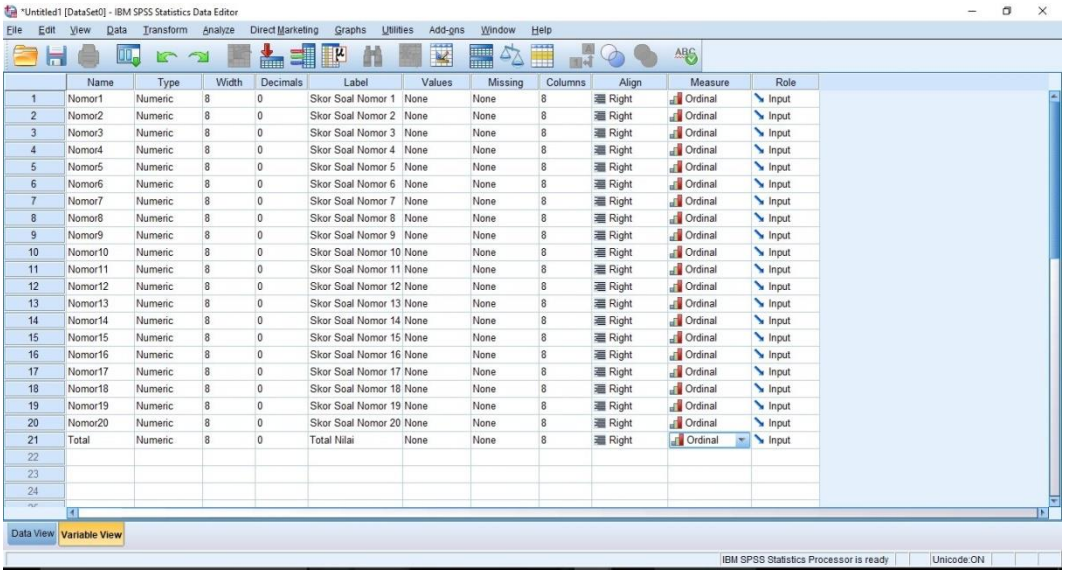
X : Scores obtained by subject of all items

Y : Score obtained from all items

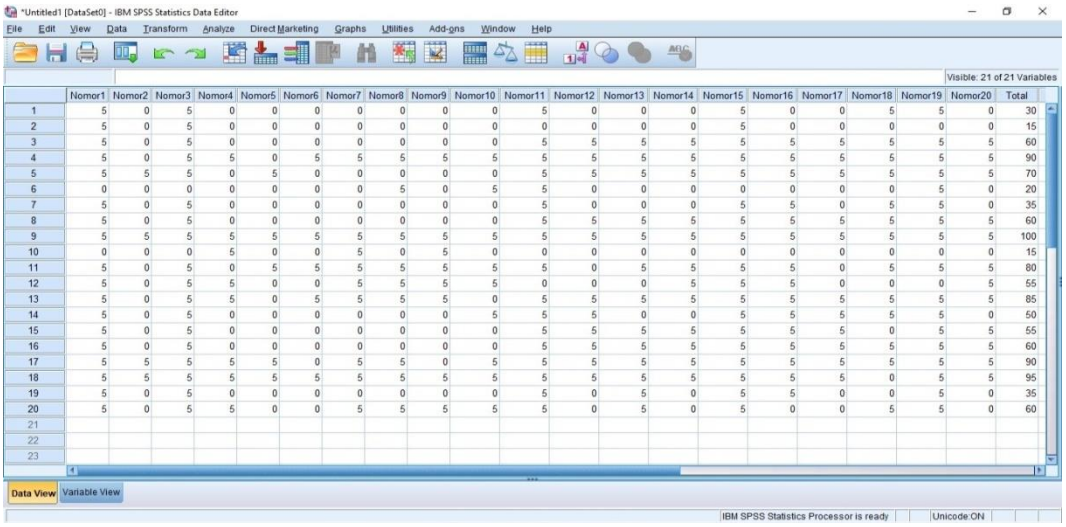
With the decision making criteria if $r_{obtained} > r_{table}$.

The researcher used SPSS 23.0 for windows to analyze validity of vocabulary mastery. The steps validity test are:

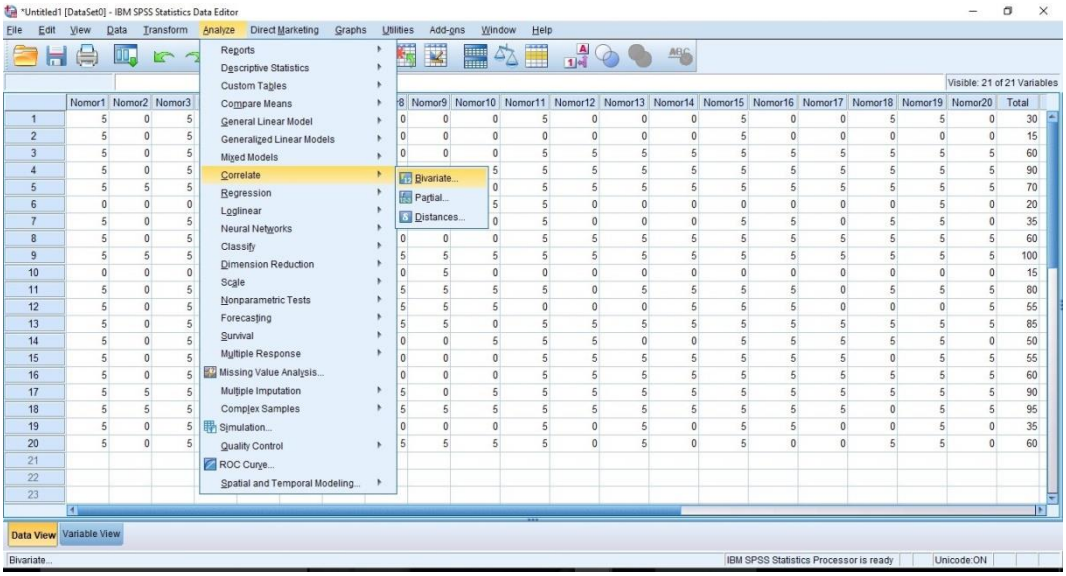
1) Open SPSS 23.0.
2) In variable view create name of column in first line “Nomor1” and so on until the last create name of column in the twenty one lines “Total”.



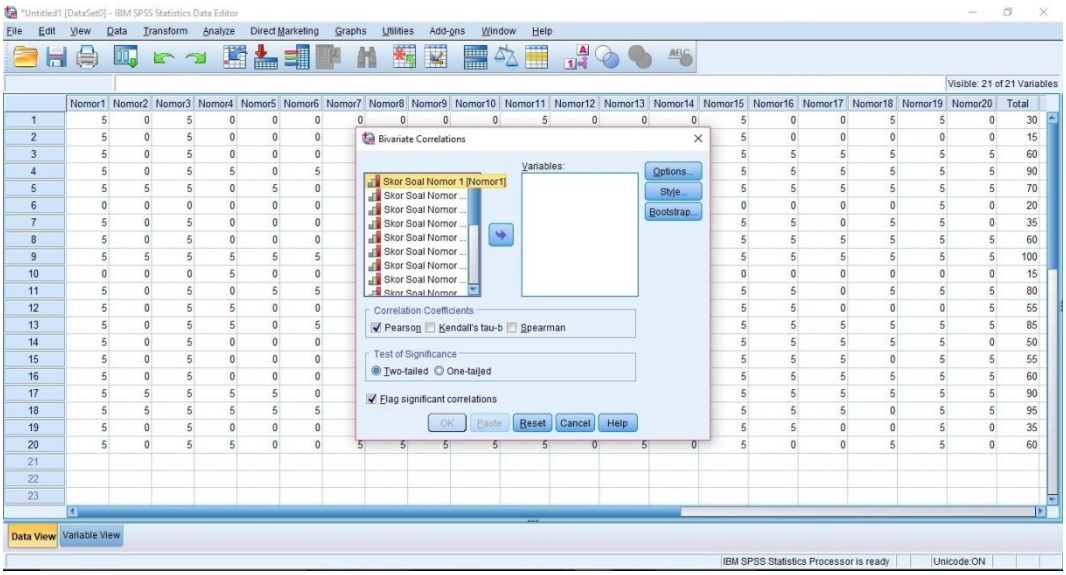
3) Entered data in data view.



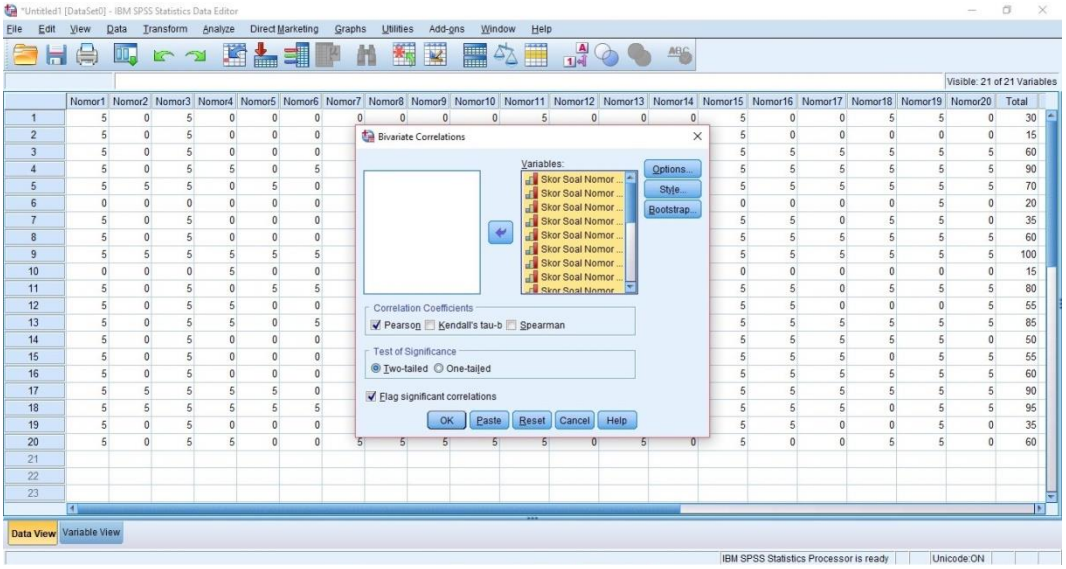
4) Choose Analyze → Correlate → Bivariate



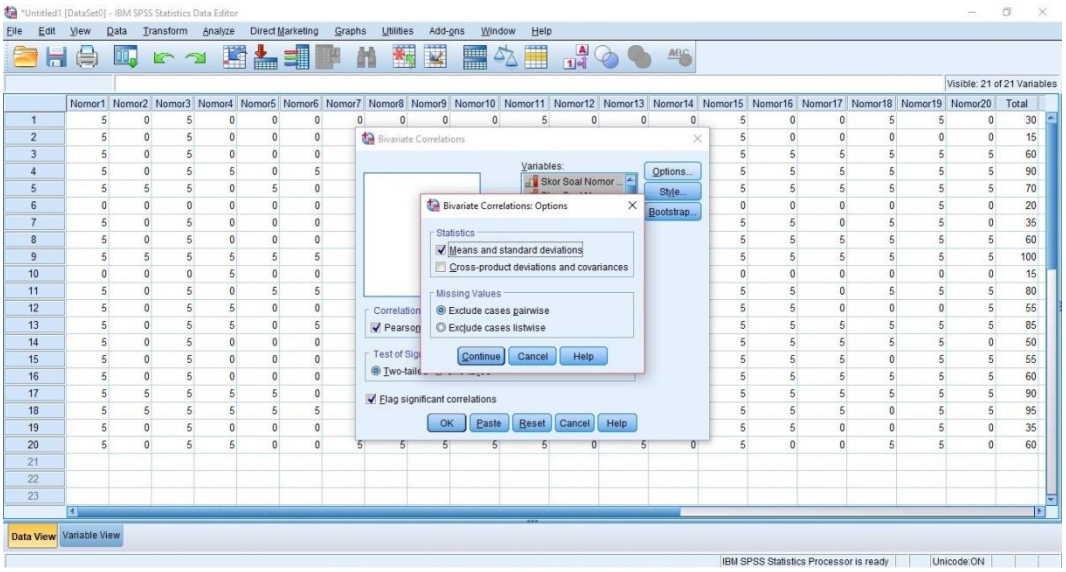
5) Choose Pearson → Two-Tailed → Flag Significant Correlations



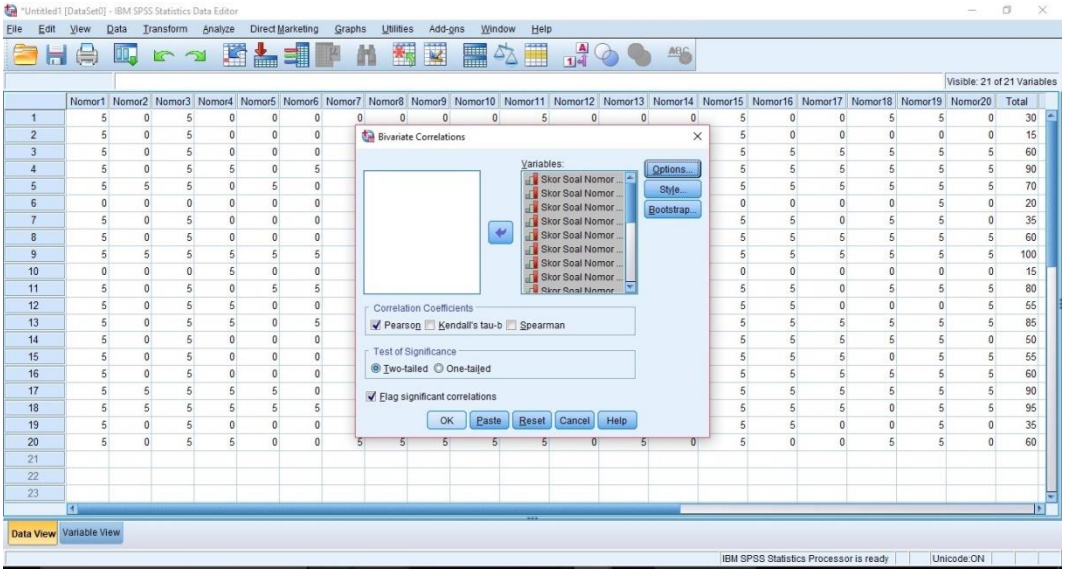
6) Move the data to the variable



7) Click Options → Means and standard deviations → Exclude cases pairwise → Continue



8) Click OK



9) The results Descriptive Statistics

Figure 3.2

Descriptive Statistics

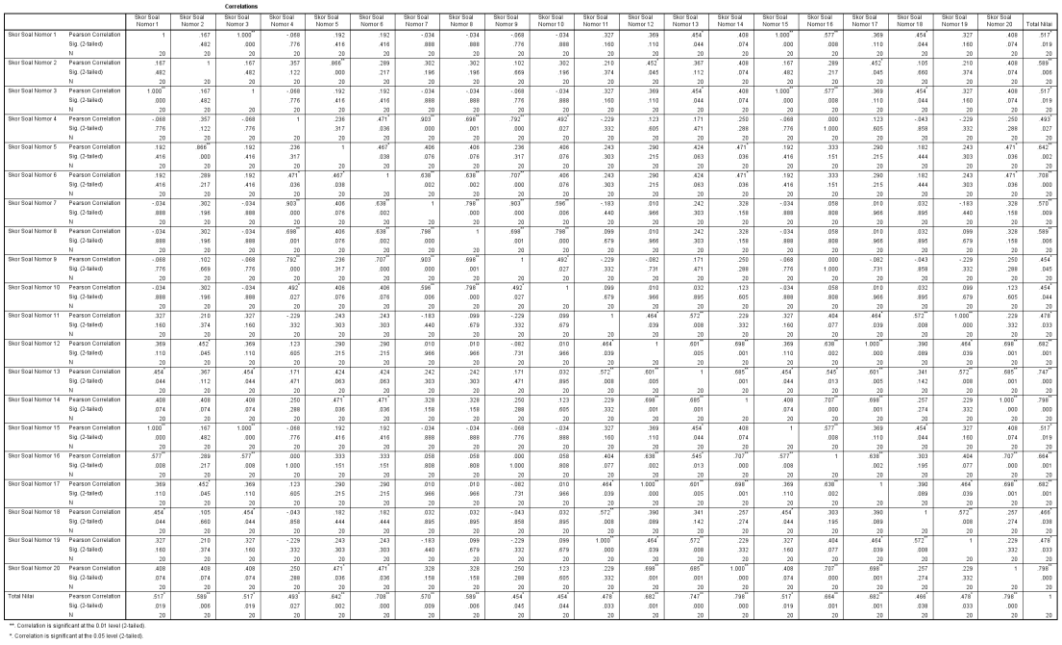
Descriptive Statistics

	Mean	Std. Deviation	N
Skor Soal Nomor 1	4.50	1.539	20
Skor Soal Nomor 2	1.00	2.052	20
Skor Soal Nomor 3	4.50	1.539	20
Skor Soal Nomor 4	2.00	2.513	20
Skor Soal Nomor 5	1.25	2.221	20
Skor Soal Nomor 6	1.25	2.221	20
Skor Soal Nomor 7	2.25	2.552	20
Skor Soal Nomor 8	2.25	2.552	20
Skor Soal Nomor 9	2.00	2.513	20
Skor Soal Nomor 10	2.25	2.552	20
Skor Soal Nomor 11	4.25	1.832	20
Skor Soal Nomor 12	2.75	2.552	20
Skor Soal Nomor 13	3.25	2.447	20
Skor Soal Nomor 14	3.00	2.513	20
Skor Soal Nomor 15	4.50	1.539	20
Skor Soal Nomor 16	3.75	2.221	20
Skor Soal Nomor 17	2.75	2.552	20
Skor Soal Nomor 18	3.25	2.447	20
Skor Soal Nomor 19	4.25	1.832	20
Skor Soal Nomor 20	3.00	2.513	20
Total Nilai	58.00	26.774	20

10) The results of validity of vocabulary mastery

Figure 3.3

The Data of Validity from SPSS



Correlations

		Skor Soal Nomor 1	Skor Soal Nomor 2	Skor Soal Nomor 3	Skor Soal Nomor 4	Skor Soal Nomor 5	Skor Soal Nomor 6	Skor Soal Nomor 7	Skor Soal Nomor 8	Skor Soal Nomor 9	Skor Soal Nomor 10	Skor Soal Nomor 11	Skor Soal Nomor 12	Skor Soal Nomor 13	Skor Soal Nomor 14	Skor Soal Nomor 15	Skor Soal Nomor 16	Skor Soal Nomor 17	Skor Soal Nomor 18	Skor Soal Nomor 19	Skor Soal Nomor 20	Total Nilai
Skor Soal Nomor 1	Pearson Correlation	1	.167	1.000**	.068	.193	.193	-.034	.034	.068	-.034	.327	.369	.414	.408	1.000**	.577**	.369	.414	.327	.408	.517*
	Sig. (2-tailed)		.482	.000	.776	.416	.416	.888	.888	.776	.888	.160	.110	.044	.074	.000	.008	.110	.044	.160	.074	.019
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 2	Pearson Correlation	.167	1	.167	.357	.866**	.399	.302	.302	.102	.302	.316	.452*	.367	.408	.167	.399	.452*	.105	.316	.408	.599**
	Sig. (2-tailed)	.482		.482	.122	.000	.217	.196	.196	.669	.196	.374	.045	.112	.074	.482	.217	.045	.660	.374	.074	.006
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 3	Pearson Correlation	1.000**	.167	1	.068	.193	.193	-.034	-.034	.068	-.034	.327	.369	.414	.408	1.000**	.577**	.369	.414	.327	.408	.517*
	Sig. (2-tailed)	.000	.482		.776	.416	.416	.888	.888	.776	.888	.160	.110	.044	.074	.000	.008	.110	.044	.160	.074	.019
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 4	Pearson Correlation	.068	.357	.068	1	.236	.471*	.937**	.698**	.792**	.492*	-.226	.123	.171	.255	.068	.000	.123	-.043	.229	.255	.497*
	Sig. (2-tailed)	.776	.122	.776		.317	.036	.000	.001	.000	.027	.352	.605	.471	.280	.776	1.000	.605	.858	.332	.280	.027
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 5	Pearson Correlation	.193	.866**	.193	.236	1	.460*	.406	.406	.236	.406	.243	.296	.424	.471*	.193	.333	.296	.182	.243	.471*	.642**
	Sig. (2-tailed)	.416	.000	.416	.317		.038	.076	.076	.317	.076	.303	.215	.063	.036	.416	.151	.215	.444	.303	.036	.002
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 6	Pearson Correlation	.193	.399	.193	.471*	.460*	1	.638**	.638**	.707**	.406	.243	.296	.424	.471*	.193	.333	.296	.182	.243	.471*	.709**
	Sig. (2-tailed)	.416	.217	.416	.036	.038		.002	.002	.000	.076	.303	.215	.063	.036	.416	.151	.215	.444	.303	.036	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 7	Pearson Correlation	-.034	.302	-.034	.937**	.406	.638**	1	.798**	.903**	.596**	-.193	.010	.242	.328	-.034	.058	.010	.032	-.183	.328	.578**
	Sig. (2-tailed)	.888	.196	.888	.000	.076	.002		.000	.000	.006	.440	.966	.303	.158	.888	.808	.966	.895	.440	.158	.009
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 8	Pearson Correlation	-.034	.302	-.034	.698**	.406	.638**	.798**	1	.698**	.798**	.099	.010	.242	.328	-.034	.058	.010	.032	.099	.328	.589**
	Sig. (2-tailed)	.888	.196	.888	.001	.076	.002	.000		.001	.000	.679	.966	.303	.158	.888	.808	.966	.895	.679	.158	.006
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 9	Pearson Correlation	.068	.102	.068	.792**	.236	.707**	.903**	.698**	1	.492*	-.226	-.082	.171	.255	.068	.000	-.082	-.043	-.229	.255	.454*
	Sig. (2-tailed)	.776	.669	.776	.000	.317	.000	.000	.001		.027	.352	.731	.471	.280	.776	1.000	.731	.858	.332	.280	.045
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 10	Pearson Correlation	-.034	.302	-.034	.492*	.406	.406	.596**	.798**	.492*	1	.099	.010	.032	.123	-.034	.058	.010	.032	.099	.123	.454*
	Sig. (2-tailed)	.888	.196	.888	.027	.076	.076	.006	.000	.027		.679	.966	.895	.605	.888	.808	.966	.895	.679	.605	.044
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 11	Pearson Correlation	.327	.316	.327	-.226	.243	.243	-.193	.099	-.229	.099	1	.464*	.572**	.229	.327	.404	.464*	.572**	1.000**	.229	.478*
	Sig. (2-tailed)	.160	.374	.160	.332	.303	.303	.440	.679	.332	.679		.039	.008	.332	.160	.077	.039	.008	.000	.332	.033
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 12	Pearson Correlation	.369	.452*	.369	.123	.296	.296	.010	.010	-.082	.010	.464*	1	.601**	.698**	.369	.638**	1.000**	.396	.464*	.698**	.662**
	Sig. (2-tailed)	.110	.045	.110	.605	.215	.215	.966	.966	.731	.966	.039		.005	.001	.110	.002	.000	.089	.039	.001	.001
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 13	Pearson Correlation	.414	.367	.414	.171	.424	.424	.242	.242	.171	.032	.572**	.601**	1	.685**	.414	.545*	.601**	.341	.572**	.685**	.747**
	Sig. (2-tailed)	.044	.112	.044	.471	.063	.063	.303	.303	.471	.895	.008	.005		.001	.044	.013	.005	.142	.008	.001	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 14	Pearson Correlation	.408	.408	.408	.255	.471*	.471*	.328	.328	.255	.123	.229	.698**	.685**	1	.408	.707**	.698**	.257	.229	1.000**	.799**
	Sig. (2-tailed)	.074	.074	.074	.280	.036	.036	.158	.158	.280	.605	.332	.001	.001		.074	.000	.001	.274	.332	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 15	Pearson Correlation	1.000**	.167	1.000**	.068	.193	.193	-.034	-.034	.068	-.034	.327	.369	.414	.408	1	.577**	.369	.414	.327	.408	.517*
	Sig. (2-tailed)	.000	.482	.000	.776	.416	.416	.888	.888	.776	.888	.160	.110	.044	.074		.008	.110	.044	.160	.074	.019
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 16	Pearson Correlation	.577**	.269	.577**	.000	.333	.333	.058	.058	.000	.058	.404	.638**	.545*	.707**	.577**	1	.638**	.303	.404	.707**	.664**
	Sig. (2-tailed)	.008	.217	.008	1.000	.151	.151	.808	.808	1.000	.808	.077	.002	.013	.000	.008		.002	.195	.077	.000	.001
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 17	Pearson Correlation	.369	.452*	.369	.123	.296	.296	.010	.010	-.082	.010	.464*	1.000**	.601**	.698**	.369	.638**	1	.396	.464*	.698**	.662**
	Sig. (2-tailed)	.110	.045	.110	.605	.215	.215	.966	.966	.731	.966	.039	.000	.005	.001	.110	.002		.089	.039	.001	.001
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 18	Pearson Correlation	.414	.105	.414	.043	.182	.182	.032	.032	.043	.032	.572**	.396	.341	.257	.414	.303	.396	1	.572**	.257	.466*
	Sig. (2-tailed)	.044	.660	.044	.858	.444	.444	.895	.895	.858	.895	.008	.089	.142	.274	.044	.195	.089		.008	.274	.038
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 19	Pearson Correlation	.327	.316	.327	-.229	.243	.243	-.183	.099	-.229	.099	1.000**	.464*	.572**	.229	.327	.404	.464*	.572**	1	.229	.478*
	Sig. (2-tailed)	.160	.374	.160	.332	.303	.303	.440	.679	.332	.679	.000	.039	.008	.332	.160	.077	.039	.008		.332	.033
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 20	Pearson Correlation	.408	.408	.408	.255	.471*	.471*	.328	.328	.255	.123	.229	.698**	.685**	1.000**	.408	.707**	.698**	.257	.229	1	.799**
	Sig. (2-tailed)	.074	.074	.074	.280	.036	.036	.158	.158	.280	.605	.332	.001	.001	.000	.074	.000	.001	.274	.332		.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Total Nilai	Pearson Correlation	.517*	.599**	.517*	.497*	.642**	.709**	.578**	.589**	.454*	.454*	.478*	.662**	.747**	.799**	.517*	.664**	.662**	.466*	.478*	.799**	1
	Sig. (2-tailed)	.019	.006	.019	.027	.002	.000	.009	.006	.045	.044	.033	.001	.000	.000	.019	.001	.001	.038	.033	.000	
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

To test the validity in every number of questions are by using r-table. In this research, the researcher used significant level 5% or 0.05 with n-2 (20-2=18). The r-table in this below:

Figure 3.4

The r Table

Tabel r untuk df = 1 - 50

df = (N-2)	Tingkat signifikansi untuk uji satu arah				
	0.05	0.025	0.01	0.005	0.0005
	Tingkat signifikansi untuk uji dua arah				
	0.1	0.05	0.02	0.01	0.001
1	0.9877	0.9969	0.9995	0.9999	1.0000
2	0.9000	0.9500	0.9800	0.9900	0.9990
3	0.8054	0.8783	0.9343	0.9587	0.9911
4	0.7293	0.8114	0.8822	0.9172	0.9741
5	0.6694	0.7545	0.8329	0.8745	0.9509
6	0.6215	0.7067	0.7887	0.8343	0.9249
7	0.5822	0.6664	0.7498	0.7977	0.8983
8	0.5494	0.6319	0.7155	0.7646	0.8721
9	0.5214	0.6021	0.6851	0.7348	0.8470
10	0.4973	0.5760	0.6581	0.7079	0.8233
11	0.4762	0.5529	0.6339	0.6835	0.8010
12	0.4575	0.5324	0.6120	0.6614	0.7800
13	0.4409	0.5140	0.5923	0.6411	0.7604
14	0.4259	0.4973	0.5742	0.6226	0.7419
15	0.4124	0.4821	0.5577	0.6055	0.7247
16	0.4000	0.4683	0.5425	0.5897	0.7084
17	0.3887	0.4555	0.5285	0.5751	0.6932
18	0.3783	0.4438	0.5155	0.5614	0.6788
19	0.3687	0.4329	0.5034	0.5487	0.6652
20	0.3598	0.4227	0.4921	0.5368	0.6524
21	0.3515	0.4132	0.4815	0.5256	0.6402
22	0.3438	0.4044	0.4716	0.5151	0.6287
23	0.3365	0.3961	0.4622	0.5052	0.6178
24	0.3297	0.3882	0.4534	0.4958	0.6074
25	0.3233	0.3809	0.4451	0.4869	0.5974
26	0.3172	0.3739	0.4372	0.4785	0.5880
27	0.3115	0.3673	0.4297	0.4705	0.5790
28	0.3061	0.3610	0.4226	0.4629	0.5703
29	0.3009	0.3550	0.4158	0.4556	0.5620
30	0.2960	0.3494	0.4093	0.4487	0.5541
31	0.2913	0.3440	0.4032	0.4421	0.5465
32	0.2869	0.3388	0.3972	0.4357	0.5392
33	0.2826	0.3338	0.3916	0.4296	0.5322
34	0.2785	0.3291	0.3862	0.4238	0.5254
35	0.2746	0.3246	0.3810	0.4182	0.5189
36	0.2709	0.3202	0.3760	0.4128	0.5126
37	0.2673	0.3160	0.3712	0.4076	0.5066
38	0.2638	0.3120	0.3665	0.4026	0.5007
39	0.2605	0.3081	0.3621	0.3978	0.4950
40	0.2573	0.3044	0.3578	0.3932	0.4896
41	0.2542	0.3008	0.3536	0.3887	0.4843
42	0.2512	0.2973	0.3496	0.3843	0.4791
43	0.2483	0.2940	0.3457	0.3801	0.4742
44	0.2455	0.2907	0.3420	0.3761	0.4694
45	0.2429	0.2876	0.3384	0.3721	0.4647
46	0.2403	0.2845	0.3348	0.3683	0.4601
47	0.2377	0.2816	0.3314	0.3646	0.4557
48	0.2353	0.2787	0.3281	0.3610	0.4514
49	0.2329	0.2759	0.3249	0.3575	0.4473
50	0.2306	0.2732	0.3218	0.3542	0.4432

So, the r value of the table is 0.4438 or 0.444. All items are valid. The data in this below:

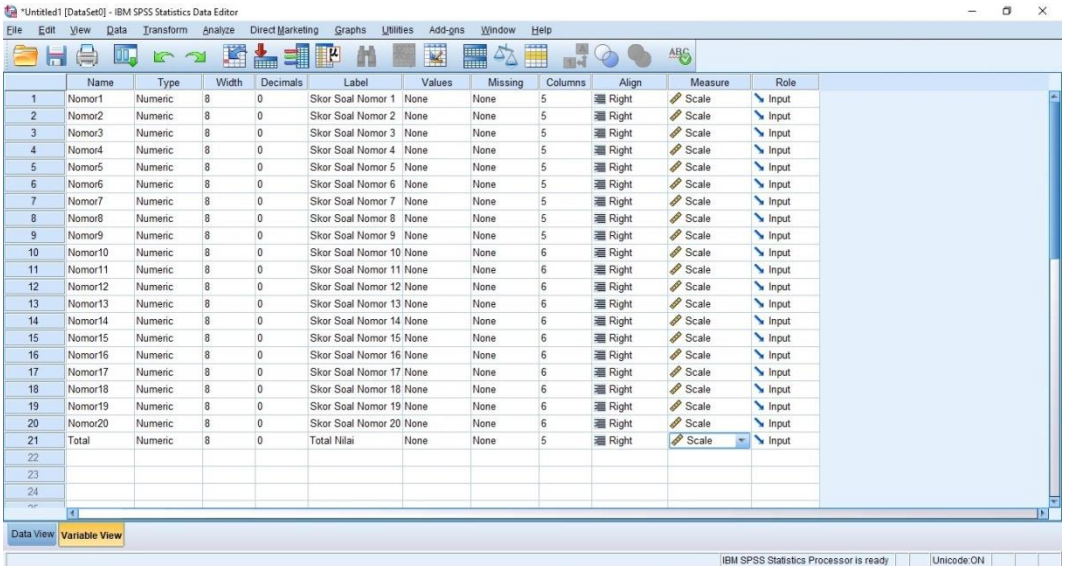
Table 3.2

The Data of Validity the Vocabulary Mastery

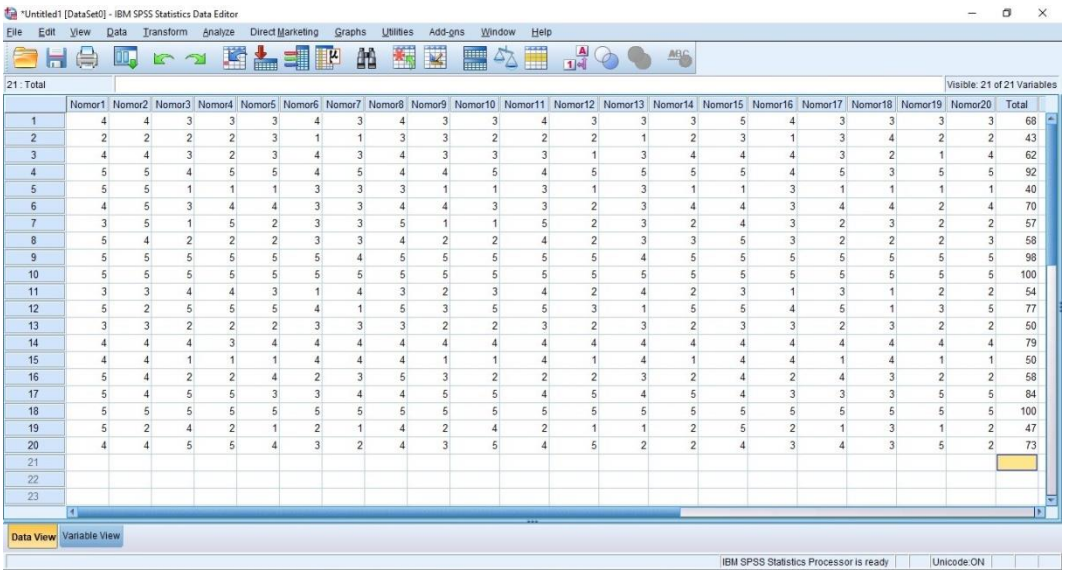
Number 1	0.517 > 0.444 – Valid
Number 2	0.589 > 0.444 – Valid
Number 3	0.517 > 0.444 – Valid
Number 4	0.493 > 0.444 – Valid
Number 5	0.642 > 0.444 – Valid
Number 6	0.708 > 0.444 – Valid
Number 7	0.570 > 0.444 – Valid
Number 8	0.589 > 0.444 – Valid
Number 9	0.454 > 0.444 – Valid
Number 10	0.454 > 0.444 – Valid
Number 11	0.478 > 0.444 – Valid
Number 12	0.682 > 0.444 – Valid
Number 13	0.747 > 0.444 – Valid
Number 14	0.798 > 0.444 – Valid
Number 15	0.517 > 0.444 – Valid
Number 16	0.664 > 0.444 – Valid
Number 17	0.682 > 0.444 – Valid
Number 18	0.466 > 0.444 – Valid
Number 19	0.478 > 0.444 – Valid
Number 20	0.798 > 0.444 – Valid

The researcher used SPSS 23.0 for windows to analyze the validity of the learning motivation. The steps of validity test are:

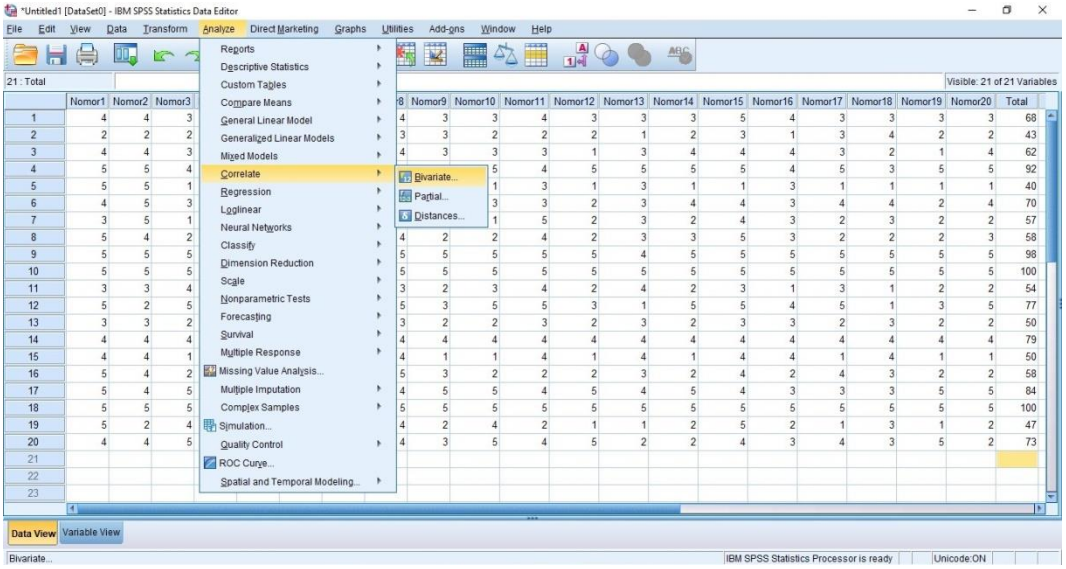
1) Open SPSS 23.0.
2) In variable view create name of column in first line “Nomor1” and so on until the last create name of column in the twenty one lines “Total”.



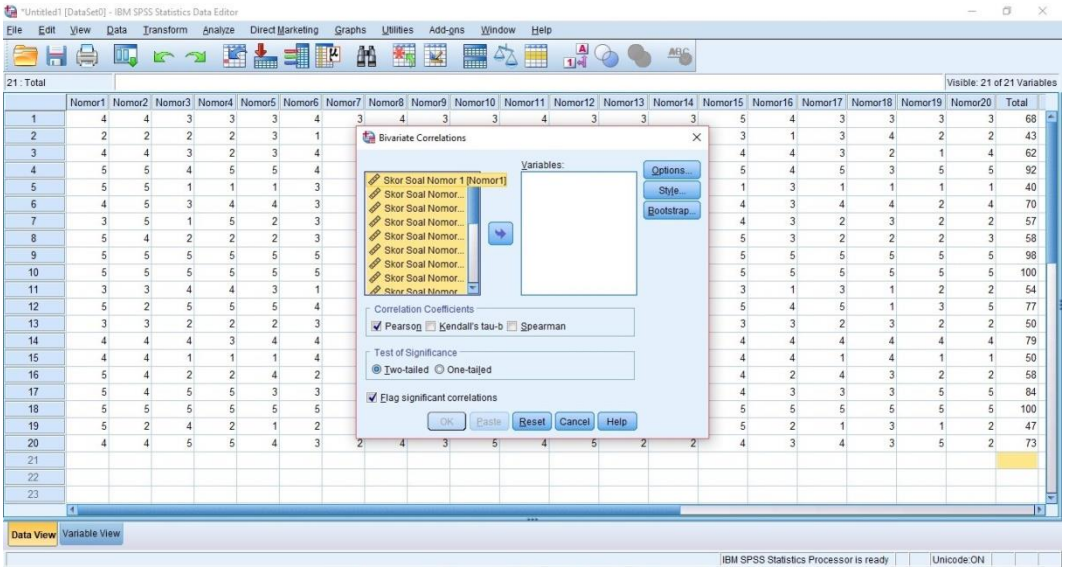
3) Entered data in data view.



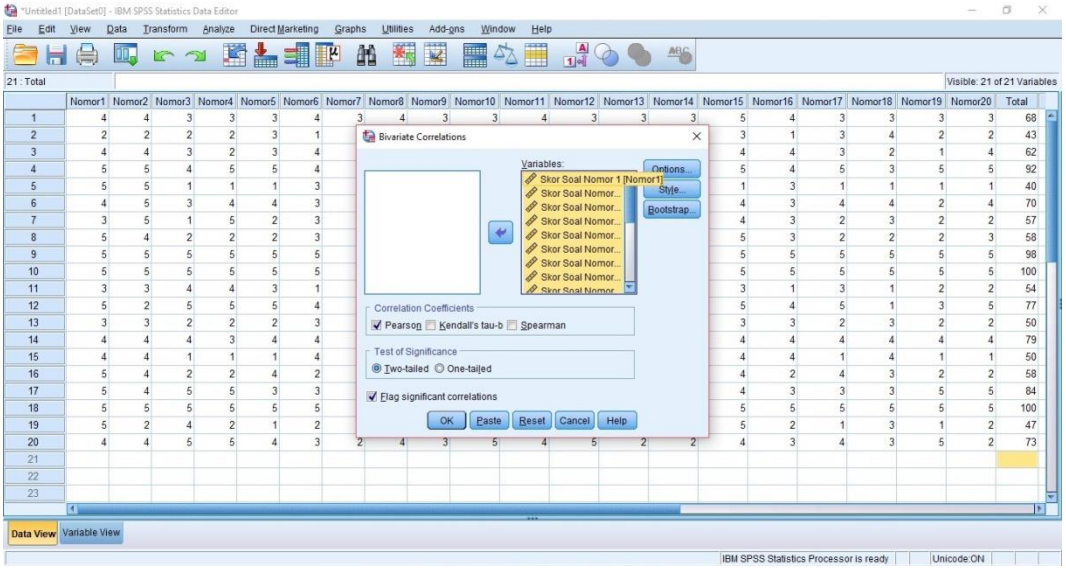
4) Choose Analyze → Correlate → Bivariate



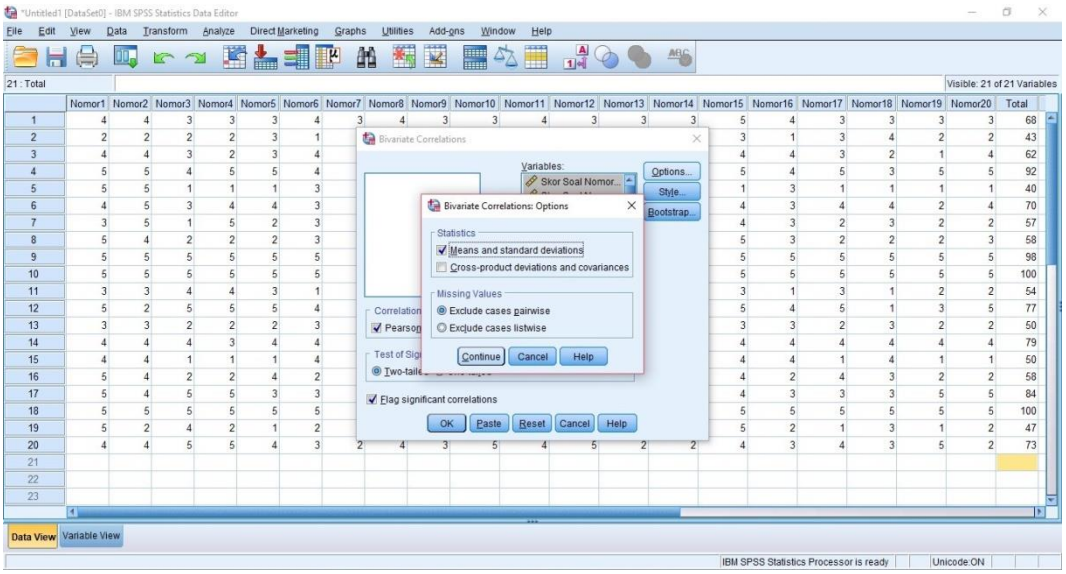
5) Choose Pearson → Two-Tailed → Flag Significant Correlations



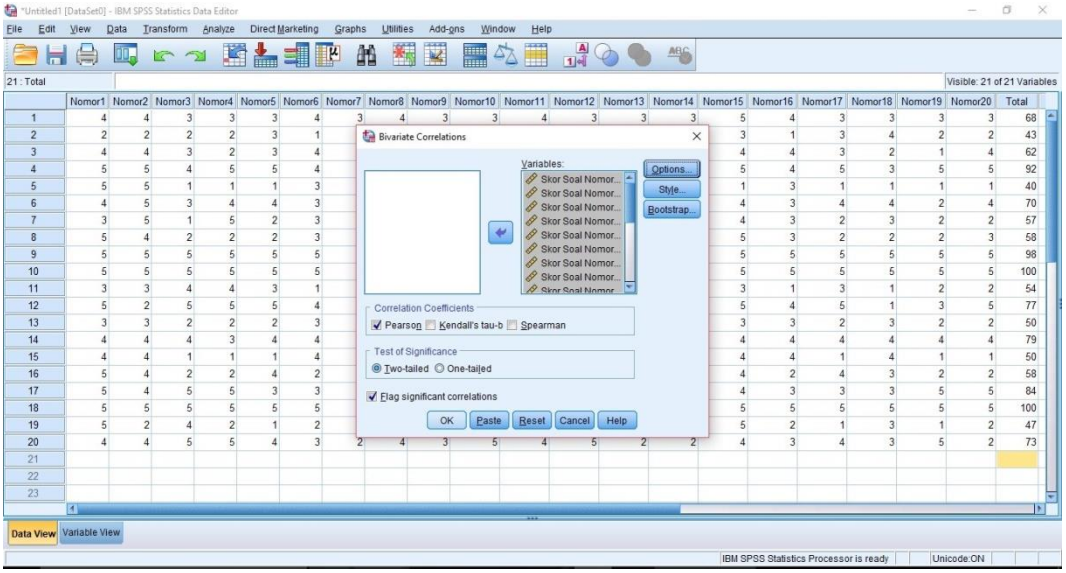
6) Move the data to the variable



7) Click Options → Means and standard deviations → Exclude cases pairwise → Continue



8) Click Ok



9) The result of the Descriptive Statistics

Figure 3.5

Descriptive Statistics of Learning Motivation

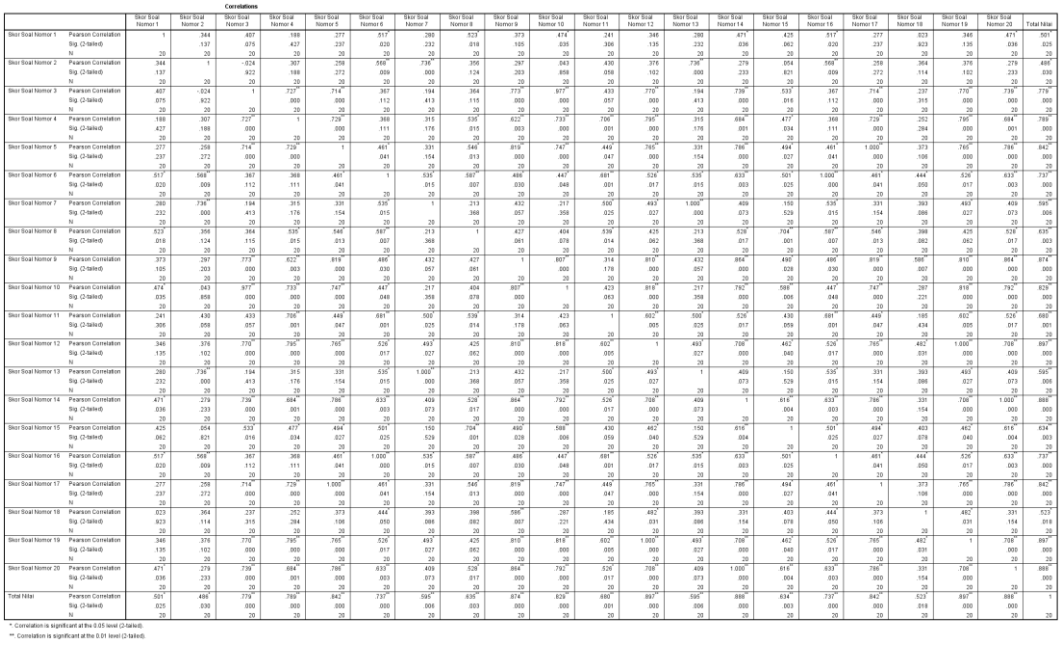
Descriptive Statistics

	Mean	Std. Deviation	N
Skor Soal Nomor 1	4.25	.910	20
Skor Soal Nomor 2	3.95	1.050	20
Skor Soal Nomor 3	3.30	1.490	20
Skor Soal Nomor 4	3.40	1.536	20
Skor Soal Nomor 5	3.25	1.410	20
Skor Soal Nomor 6	3.30	1.174	20
Skor Soal Nomor 7	3.20	1.240	20
Skor Soal Nomor 8	4.10	.718	20
Skor Soal Nomor 9	3.05	1.356	20
Skor Soal Nomor 10	3.30	1.525	20
Skor Soal Nomor 11	3.75	1.020	20
Skor Soal Nomor 12	2.90	1.586	20
Skor Soal Nomor 13	3.20	1.240	20
Skor Soal Nomor 14	3.20	1.473	20
Skor Soal Nomor 15	4.10	1.021	20
Skor Soal Nomor 16	3.30	1.174	20
Skor Soal Nomor 17	3.25	1.410	20
Skor Soal Nomor 18	3.10	1.252	20
Skor Soal Nomor 19	2.90	1.586	20
Skor Soal Nomor 20	3.20	1.473	20
Total Nilai	68.00	19.279	20

10) The results of validity of learning motivation

Figure 3.6

The Data of Learning Motivation Validity from SPSS



Correlations

		Skor Soal Nomor 1	Skor Soal Nomor 2	Skor Soal Nomor 3	Skor Soal Nomor 4	Skor Soal Nomor 5	Skor Soal Nomor 6	Skor Soal Nomor 7	Skor Soal Nomor 8	Skor Soal Nomor 9	Skor Soal Nomor 10	Skor Soal Nomor 11	Skor Soal Nomor 12	Skor Soal Nomor 13	Skor Soal Nomor 14	Skor Soal Nomor 15	Skor Soal Nomor 16	Skor Soal Nomor 17	Skor Soal Nomor 18	Skor Soal Nomor 19	Skor Soal Nomor 20	Total Nilai
Skor Soal Nomor 1	Pearson Correlation	1	.344	.407	.188	.277	.517*	.280	.527	.373	.474*	.241	.346	.280	.471*	.435	.517*	.277	.623	.346	.471*	.501*
	Sig. (2-tailed)		.137	.075	.427	.237	.020	.232	.018	.105	.035	.306	.135	.232	.036	.062	.020	.237	.023	.135	.036	.025
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 2	Pearson Correlation	.344	1	-.024	.307	.259	.569**	.736**	.356	.297	.643**	.430	.376	.736**	.279	.054	.569**	.259	.364	.376	.279	.495*
	Sig. (2-tailed)	.137		.922	.188	.272	.009	.000	.124	.203	.858	.058	.102	.000	.233	.821	.009	.272	.114	.102	.233	.030
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 3	Pearson Correlation	.407	-.024	1	.727**	.714**	.367	.194	.364	.773**	.877**	.433	.770**	.194	.739**	.537*	.367	.714**	.237	.770**	.739**	.778**
	Sig. (2-tailed)	.075	.922		.000	.000	.112	.413	.115	.000	.000	.057	.000	.413	.000	.016	.112	.000	.315	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 4	Pearson Correlation	.188	.307	.727**	1	.729**	.368	.316	.535*	.622**	.737**	.706**	.765**	.315	.684**	.417*	.368	.729**	.252	.795**	.684**	.769**
	Sig. (2-tailed)	.427	.188	.000		.000	.111	.176	.015	.003	.000	.001	.000	.176	.001	.034	.111	.000	.284	.000	.001	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 5	Pearson Correlation	.277	.259	.714**	.729**	1	.461*	.331	.546*	.819**	.747**	.449*	.765**	.331	.786**	.494*	.461*	1.000**	.373	.795**	.786**	.842**
	Sig. (2-tailed)	.237	.272	.000	.000		.041	.154	.013	.000	.000	.047	.000	.154	.000	.027	.041	.000	.106	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 6	Pearson Correlation	.517*	.569**	.367	.368	.461*	1	.535*	.597**	.486*	.447*	.681**	.526*	.535*	.633**	.501*	1.000**	.461*	.444	.526*	.633**	.737**
	Sig. (2-tailed)	.020	.009	.112	.111	.041		.015	.007	.030	.048	.001	.017	.015	.003	.025	.000	.041	.050	.017	.003	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 7	Pearson Correlation	.280	.736**	.194	.315	.331	.535*	1	.213	.432	.217	.560*	.493*	1.000**	.409	.150	.535*	.331	.393	.493*	.409	.595**
	Sig. (2-tailed)	.232	.000	.413	.176	.154	.015		.368	.057	.358	.025	.027	.000	.073	.529	.015	.154	.086	.027	.073	.006
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 8	Pearson Correlation	.527*	.356	.364	.535*	.546*	.597**	.213	1	.437*	.494*	.539*	.425	.213	.526*	.704**	.597**	.546*	.398	.425	.526*	.635**
	Sig. (2-tailed)	.018	.124	.115	.015	.013	.007	.368		.061	.078	.014	.062	.368	.017	.001	.007	.013	.082	.062	.017	.003
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 9	Pearson Correlation	.373	.297	.773**	.622**	.819**	.486*	.432	.437*	1	.807**	.314	.810**	.432	.864**	.497*	.486*	.819**	.586**	.810**	.864**	.874**
	Sig. (2-tailed)	.105	.203	.000	.003	.000	.030	.057	.061		.000	.178	.000	.057	.000	.026	.030	.000	.007	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 10	Pearson Correlation	.474*	.643**	.877**	.737**	.747**	.447*	.217	.494*	.807**	1	.423	.818**	.217	.782**	.589**	.447*	.747**	.287	.818**	.782**	.829**
	Sig. (2-tailed)	.035	.858	.000	.000	.000	.048	.358	.078	.000		.063	.000	.358	.000	.006	.048	.000	.221	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 11	Pearson Correlation	.241	.430	.433	.706**	.449*	.681**	.560*	.539*	.314	.423	1	.602**	.560*	.526*	.430	.681**	.449*	.595**	.602**	.526*	.669**
	Sig. (2-tailed)	.306	.058	.057	.001	.047	.001	.025	.014	.178	.063		.005	.025	.017	.059	.001	.047	.034	.005	.017	.001
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 12	Pearson Correlation	.346	.376	.770**	.795**	.765**	.526*	.493*	.425	.810**	.818**	.602**	1	.493*	.708**	.442*	.526*	.765**	.462*	1.000**	.708**	.897**
	Sig. (2-tailed)	.135	.102	.000	.000	.000	.017	.027	.062	.000	.000	.005		.027	.000	.040	.017	.000	.031	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 13	Pearson Correlation	.280	.736**	.194	.315	.331	.535*	1.000**	.213	.432	.217	.560*	.493*	1	.409	.150	.535*	.331	.393	.493*	.409	.595**
	Sig. (2-tailed)	.232	.000	.413	.176	.154	.015	.000	.368	.057	.358	.025	.027		.073	.529	.015	.154	.086	.027	.073	.006
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 14	Pearson Correlation	.471*	.279	.739**	.684**	.786**	.633**	.409	.526*	.864**	.782**	.526*	.708**	.409	1	.616**	.633**	.786**	.331	.708**	1.000**	.868**
	Sig. (2-tailed)	.036	.233	.000	.001	.000	.003	.073	.017	.000	.000	.017	.000	.073		.004	.003	.000	.154	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 15	Pearson Correlation	.435	.054	.537*	.417*	.494*	.501*	.150	.704**	.497*	.589**	.430	.442*	.150	.616**	1	.501*	.494*	.403	.462*	.616**	.634**
	Sig. (2-tailed)	.062	.821	.016	.034	.027	.025	.529	.001	.026	.006	.059	.040	.529	.004		.025	.027	.078	.040	.004	.003
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 16	Pearson Correlation	.517*	.569**	.367	.368	.461*	1.000**	.535*	.597**	.486*	.447*	.681**	.526*	.535*	.633**	.501*	1	.461*	.444	.526*	.633**	.737**
	Sig. (2-tailed)	.020	.009	.112	.111	.041	.000	.015	.007	.030	.048	.001	.017	.015	.003	.025		.041	.050	.017	.003	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 17	Pearson Correlation	.277	.259	.714**	.729**	1.000**	.461*	.331	.546*	.819**	.747**	.449*	.765**	.331	.786**	.494*	.461*	1	.373	.795**	.786**	.842**
	Sig. (2-tailed)	.237	.272	.000	.000	.000	.041	.154	.013	.000	.000	.047	.000	.154	.000	.027	.041		.106	.000	.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 18	Pearson Correlation	.623	.364	.237	.252	.373	.444	.393	.398	.586**	.297	.185	.462*	.393	.331	.403	.444	.373	1	.462*	.331	.523*
	Sig. (2-tailed)	.023	.114	.315	.284	.106	.050	.086	.082	.007	.221	.434	.031	.086	.154	.078	.050	.106		.031	.154	.018
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 19	Pearson Correlation	.346	.376	.770**	.795**	.795**	.526*	.493*	.425	.810**	.818**	.602**	1.000**	.493*	.708**	.442*	.526*	.795**	.462*	1	.708**	.897**
	Sig. (2-tailed)	.135	.102	.000	.000	.000	.017	.027	.062	.000	.000	.005	.000	.027	.000	.040	.017	.000	.031		.000	.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 20	Pearson Correlation	.471*	.279	.739**	.684**	.786**	.633**	.409	.526*	.864**	.782**	.526*	.708**	.409	1.000**	.616**	.633**	.786**	.331	.708**	1	.868**
	Sig. (2-tailed)	.036	.233	.000	.001	.000	.003	.073	.017	.000	.000	.017	.000	.073	.000	.004	.003	.000	.154	.000		.000
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Total Nilai	Pearson Correlation	.501*	.495*	.778**	.769**	.842**	.737**	.595**	.635**	.874**	.829**	.669**	.897**	.595**	.868**	.634**	.737**	.842**	.523*	.897**	.868**	1
	Sig. (2-tailed)	.025	.030	.000	.000	.000	.000	.006	.003	.000	.000	.001	.000	.006	.000	.003	.000	.000	.018	.000	.000	
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

To test the validity in every number of questions are by using r-table. In this research, the researcher used significant level 5% or 0.05 with n-2 (20-2=18). The r-table in this below:

Figure 3.7

The r Table

Tabel r untuk df = 1 - 50

df = (N-2)	Tingkat signifikansi untuk uji satu arah				
	0.05	0.025	0.01	0.005	0.0005
	Tingkat signifikansi untuk uji dua arah				
	0.1	0.05	0.02	0.01	0.001
1	0.9877	0.9969	0.9995	0.9999	1.0000
2	0.9000	0.9500	0.9800	0.9900	0.9990
3	0.8054	0.8783	0.9343	0.9587	0.9911
4	0.7293	0.8114	0.8822	0.9172	0.9741
5	0.6694	0.7545	0.8329	0.8745	0.9509
6	0.6215	0.7067	0.7887	0.8343	0.9249
7	0.5822	0.6664	0.7498	0.7977	0.8983
8	0.5494	0.6319	0.7155	0.7646	0.8721
9	0.5214	0.6021	0.6851	0.7348	0.8470
10	0.4973	0.5760	0.6581	0.7079	0.8233
11	0.4762	0.5529	0.6339	0.6835	0.8010
12	0.4575	0.5324	0.6120	0.6614	0.7800
13	0.4409	0.5140	0.5923	0.6411	0.7604
14	0.4259	0.4973	0.5742	0.6226	0.7419
15	0.4124	0.4821	0.5577	0.6055	0.7247
16	0.4000	0.4683	0.5425	0.5897	0.7084
17	0.3887	0.4555	0.5285	0.5751	0.6932
18	0.3783	0.4438	0.5155	0.5614	0.6788
19	0.3687	0.4329	0.5034	0.5487	0.6652
20	0.3598	0.4227	0.4921	0.5368	0.6524
21	0.3515	0.4132	0.4815	0.5256	0.6402
22	0.3438	0.4044	0.4716	0.5151	0.6287
23	0.3365	0.3961	0.4622	0.5052	0.6178
24	0.3297	0.3882	0.4534	0.4958	0.6074
25	0.3233	0.3809	0.4451	0.4869	0.5974
26	0.3172	0.3739	0.4372	0.4785	0.5880
27	0.3115	0.3673	0.4297	0.4705	0.5790
28	0.3061	0.3610	0.4226	0.4629	0.5703
29	0.3009	0.3550	0.4158	0.4556	0.5620
30	0.2960	0.3494	0.4093	0.4487	0.5541
31	0.2913	0.3440	0.4032	0.4421	0.5465
32	0.2869	0.3388	0.3972	0.4357	0.5392
33	0.2826	0.3338	0.3916	0.4296	0.5322
34	0.2785	0.3291	0.3862	0.4238	0.5254
35	0.2746	0.3246	0.3810	0.4182	0.5189
36	0.2709	0.3202	0.3760	0.4128	0.5126
37	0.2673	0.3160	0.3712	0.4076	0.5066
38	0.2638	0.3120	0.3665	0.4026	0.5007
39	0.2605	0.3081	0.3621	0.3978	0.4950
40	0.2573	0.3044	0.3578	0.3932	0.4896
41	0.2542	0.3008	0.3536	0.3887	0.4843
42	0.2512	0.2973	0.3496	0.3843	0.4791
43	0.2483	0.2940	0.3457	0.3801	0.4742
44	0.2455	0.2907	0.3420	0.3761	0.4694
45	0.2429	0.2876	0.3384	0.3721	0.4647
46	0.2403	0.2845	0.3348	0.3683	0.4601
47	0.2377	0.2816	0.3314	0.3646	0.4557
48	0.2353	0.2787	0.3281	0.3610	0.4514
49	0.2329	0.2759	0.3249	0.3575	0.4473
50	0.2306	0.2732	0.3218	0.3542	0.4432

So, the r value of the table is 0.4438 or 0.444. All items are valid.

The data in this follows:

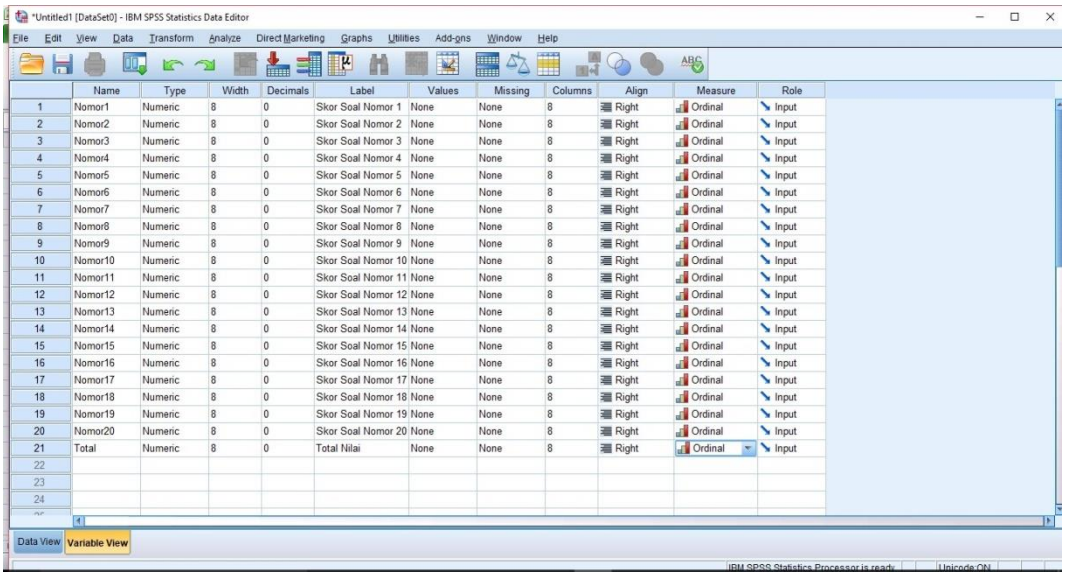
Table 3.3

The Data of Validity the Learning Motivation

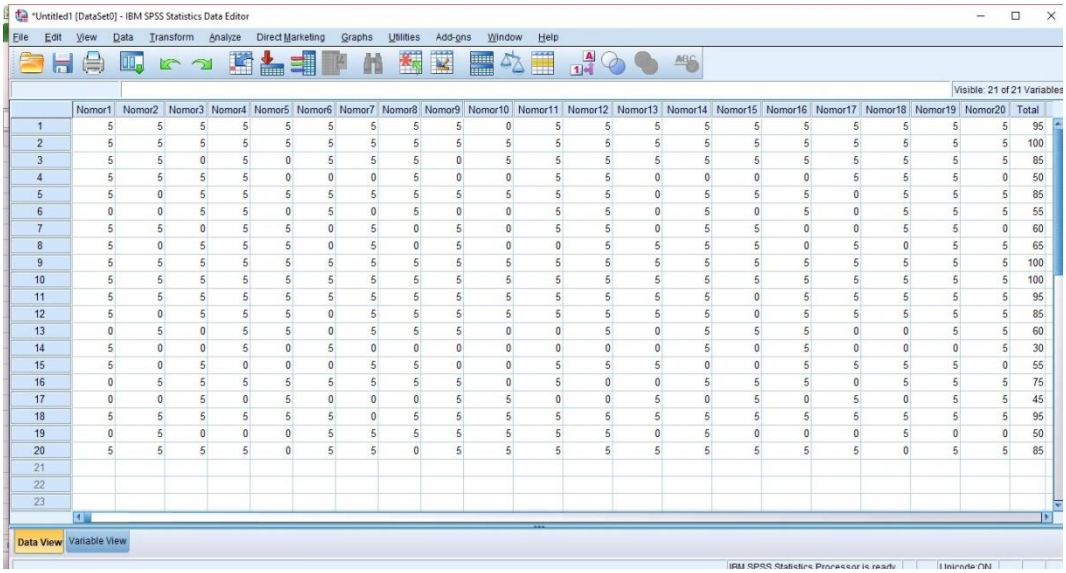
Number 1	0.501 > 0.444 – Valid
Number 2	0.486 > 0.444 – Valid
Number 3	0.779 > 0.444 – Valid
Number 4	0.789 > 0.444 – Valid
Number 5	0.842 > 0.444 – Valid
Number 6	0.737 > 0.444 – Valid
Number 7	0.595 > 0.444 – Valid
Number 8	0.635 > 0.444 – Valid
Number 9	0.874 > 0.444 – Valid
Number 10	0.829 > 0.444 – Valid
Number 11	0.680 > 0.444 – Valid
Number 12	0.897 > 0.444 – Valid
Number 13	0.595 > 0.444 – Valid
Number 14	0.888 > 0.444 – Valid
Number 15	0.634 > 0.444 – Valid
Number 16	0.737 > 0.444 – Valid
Number 17	0.842 > 0.444 – Valid
Number 18	0.523 > 0.444 – Valid
Number 19	0.897 > 0.444 – Valid
Number 20	0.888 > 0.444 – Valid

The researcher used SPSS 23.0 for windows to analyze the validity of reading comprehension. The steps validity as follows:

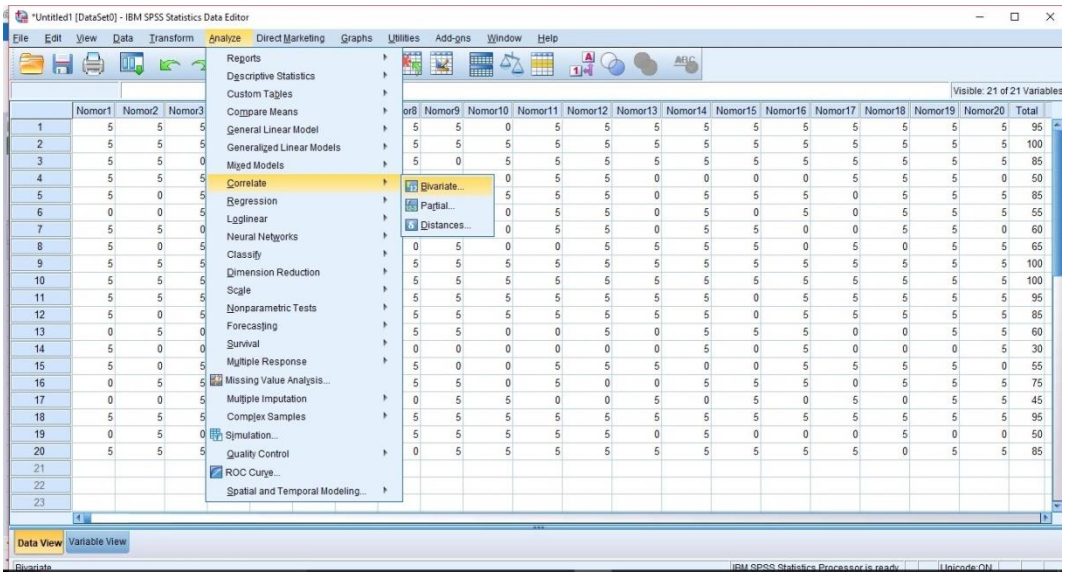
1) Open SPSS 23.0.
2) In variable view create name of column in first line “Nomor1” and so on until the last create name of column in the twenty one lines “Total”.



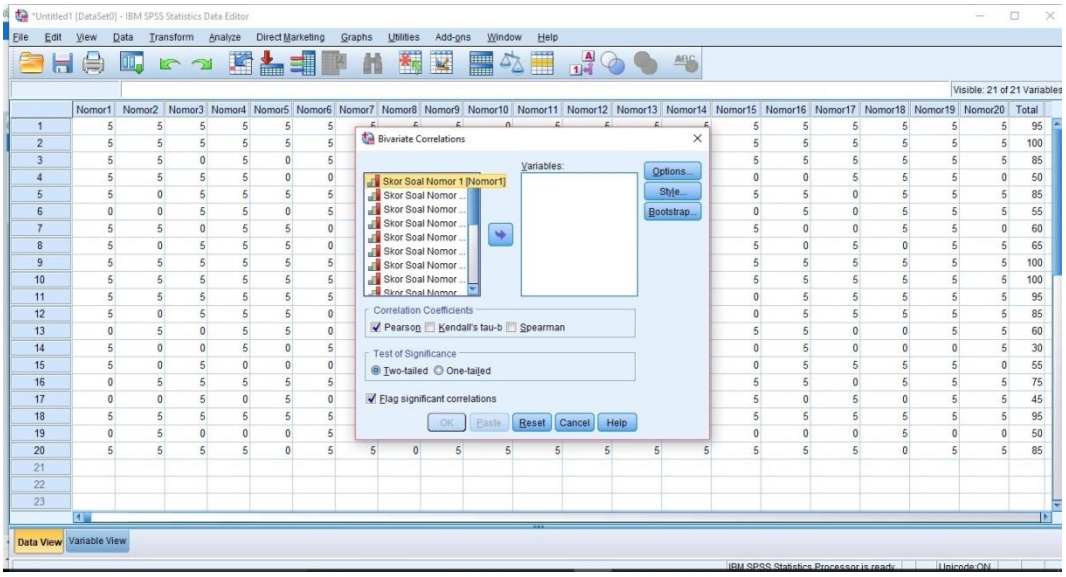
3) Entered the data in data view.



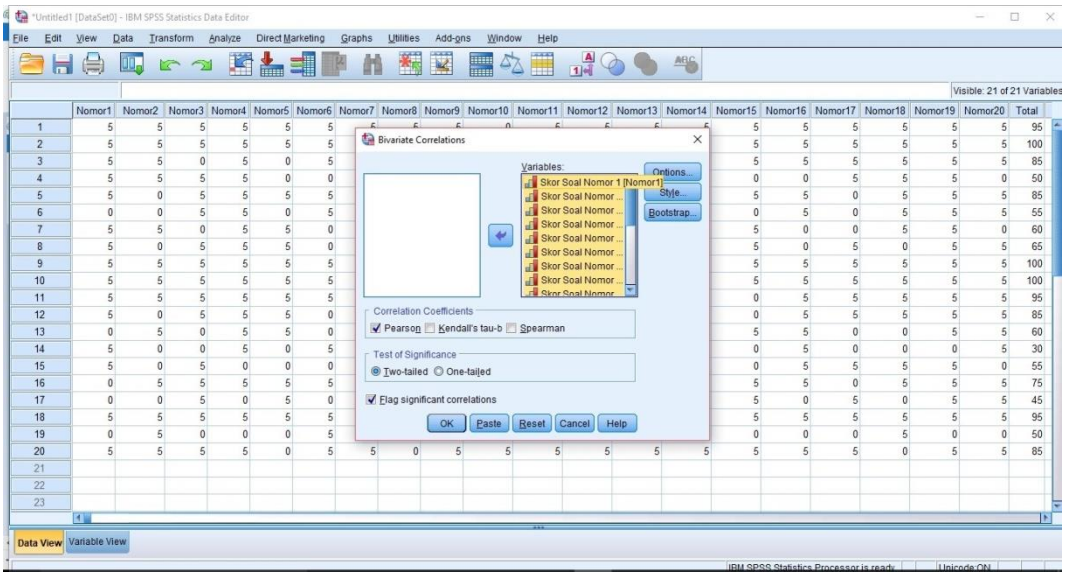
4) Choose Analyze → Correlate → Bivariate



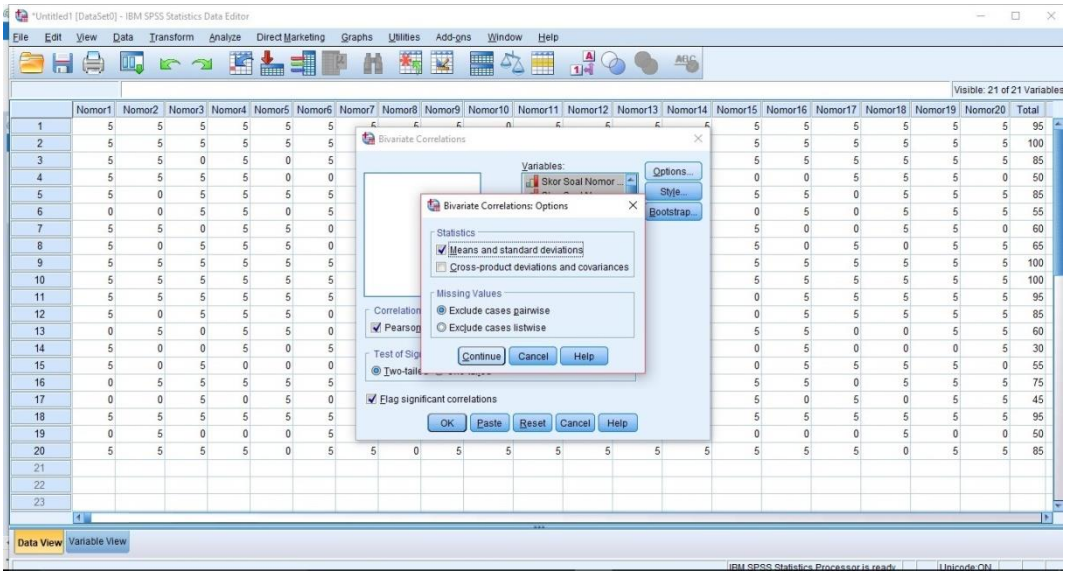
5) Choose Pearson → Two-Tailed → Flag Significant Correlations



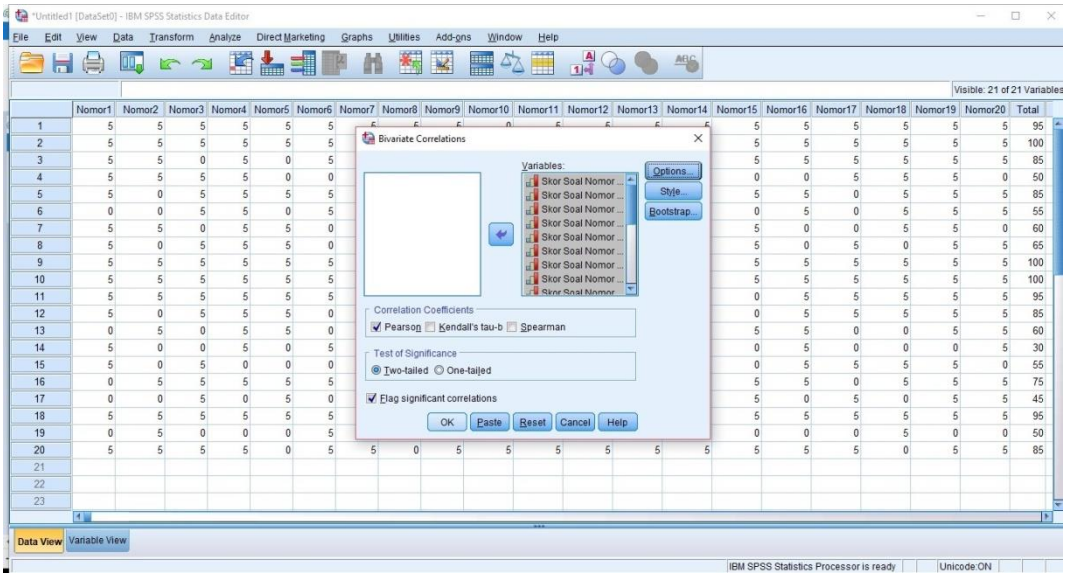
6) Move the data to the variable



7) Click Options → Means and standard deviations → Exclude cases pairwise → Continue



8) Click Ok



9) The result of Descriptive Statistics

Figure 3.8

Descriptive Statistics of Reading Comprehension

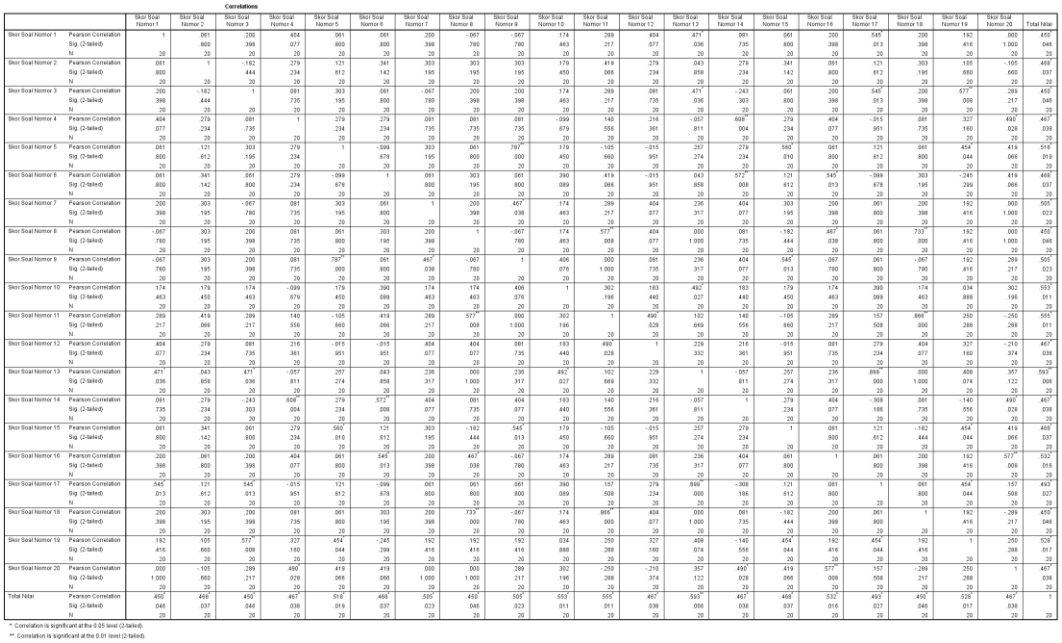
Descriptive Statistics

	Mean	Std. Deviation	N
Skor Soal Nomor 1	3.75	2.221	20
Skor Soal Nomor 2	3.25	2.447	20
Skor Soal Nomor 3	3.75	2.221	20
Skor Soal Nomor 4	4.25	1.832	20
Skor Soal Nomor 5	3.25	2.447	20
Skor Soal Nomor 6	3.25	2.447	20
Skor Soal Nomor 7	3.75	2.221	20
Skor Soal Nomor 8	3.75	2.221	20
Skor Soal Nomor 9	3.75	2.221	20
Skor Soal Nomor 10	2.75	2.552	20
Skor Soal Nomor 11	4.00	2.052	20
Skor Soal Nomor 12	4.25	1.832	20
Skor Soal Nomor 13	3.00	2.513	20
Skor Soal Nomor 14	4.25	1.832	20
Skor Soal Nomor 15	3.25	2.447	20
Skor Soal Nomor 16	3.75	2.221	20
Skor Soal Nomor 17	3.25	2.447	20
Skor Soal Nomor 18	3.75	2.221	20
Skor Soal Nomor 19	4.50	1.539	20
Skor Soal Nomor 20	4.00	2.052	20
Total Nilai	73.50	21.710	20

10) The result of validity reading comprehension

Figure 3.9

The Data of Reading Comprehension Validity from SPSS



Correlations

		Skor Soal Nomor 1	Skor Soal Nomor 2	Skor Soal Nomor 3	Skor Soal Nomor 4	Skor Soal Nomor 5	Skor Soal Nomor 6	Skor Soal Nomor 7	Skor Soal Nomor 8	Skor Soal Nomor 9	Skor Soal Nomor 10	Skor Soal Nomor 11	Skor Soal Nomor 12	Skor Soal Nomor 13	Skor Soal Nomor 14	Skor Soal Nomor 15	Skor Soal Nomor 16	Skor Soal Nomor 17	Skor Soal Nomor 18	Skor Soal Nomor 19	Skor Soal Nomor 20	Total Nilai
Skor Soal Nomor 1	Pearson Correlation	1	.061	.200	.404	.061	.061	.200	.067	-.067	.174	.399	.404	.471	.061	.061	.200	.545*	.200	.182	.000	.450*
	Sig. (2-tailed)		.800	.398	.077	.800	.800	.398	.780	.780	.463	.217	.077	.036	.735	.800	.398	.013	.398	.416	1.000	.046
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 2	Pearson Correlation	.061	1	-.182	.279	.121	.341	.303	.303	.303	.179	.418	.279	.043	.279	.341	.061	.121	.303	.105	-.105	.468*
	Sig. (2-tailed)	.800		.444	.234	.612	.142	.195	.195	.195	.450	.066	.234	.858	.234	.142	.800	.612	.195	.660	.660	.037
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 3	Pearson Correlation	.200	-.182	1	.061	.303	.061	-.067	.200	.200	.174	.399	.061	.471	.243	.061	.200	.545*	.200	.577**	.269	.450*
	Sig. (2-tailed)	.398	.444		.735	.195	.800	.780	.398	.398	.463	.217	.735	.036	.303	.800	.398	.013	.398	.009	.217	.046
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 4	Pearson Correlation	.404	.279	.061	1	.279	.279	.061	.061	.061	-.099	.140	.216	-.057	.618**	.279	.404	-.015	.061	.327	.497*	.467*
	Sig. (2-tailed)	.077	.234	.735		.234	.234	.735	.735	.735	.679	.556	.361	.811	.004	.234	.077	.951	.735	.160	.028	.038
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 5	Pearson Correlation	.061	.121	.303	.279	1	-.099	.303	.061	.787**	.179	-.105	-.015	.257	.279	.560*	.061	.121	.061	.454*	.419	.518*
	Sig. (2-tailed)	.800	.612	.195	.234		.678	.195	.800	.000	.450	.660	.951	.274	.234	.010	.800	.612	.800	.044	.066	.019
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 6	Pearson Correlation	.061	.341	.061	.279	-.099	1	.061	.303	.061	.390	.418	-.015	.043	.572**	.121	.545*	-.099	.303	-.245	.419	.468*
	Sig. (2-tailed)	.800	.142	.800	.234	.678		.800	.195	.800	.089	.066	.951	.858	.008	.612	.013	.678	.195	.299	.066	.037
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 7	Pearson Correlation	.200	.303	-.067	.061	.303	.061	1	.200	.467*	.174	.399	.404	.236	.404	.303	.200	.061	.200	.182	.000	.505*
	Sig. (2-tailed)	.398	.195	.780	.735	.195	.800		.398	.038	.463	.217	.077	.317	.077	.195	.398	.800	.398	.416	1.000	.023
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 8	Pearson Correlation	-.067	.303	.200	.061	.061	.303	.200	1	-.067	.174	.577**	.404	.000	.061	-.182	.467*	.061	.733**	.182	.000	.450*
	Sig. (2-tailed)	.780	.195	.398	.735	.800	.195	.398		.780	.463	.009	.077	1.000	.735	.444	.038	.800	.000	.416	1.000	.046
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 9	Pearson Correlation	-.067	.303	.200	.061	.787**	.061	.467*	-.067	1	.406	.000	.061	.236	.404	.545*	-.067	.061	-.067	.182	.269	.505*
	Sig. (2-tailed)	.780	.195	.398	.735	.000	.800	.038	.780		.076	1.000	.735	.317	.077	.013	.780	.800	.780	.416	.217	.023
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 10	Pearson Correlation	.174	.179	.174	-.099	.179	.390	.174	.174	.406	1	.302	.183	.492*	.183	.179	.174	.390	.174	.034	.302	.553*
	Sig. (2-tailed)	.463	.450	.463	.679	.450	.089	.463	.463	.076		.196	.440	.027	.440	.450	.463	.089	.463	.888	.196	.011
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 11	Pearson Correlation	.399	.418	.399	.140	-.105	.418	.399	.577**	.000	.302	1	.490*	.182	.140	-.105	.399	.157	.866**	.250	-.250	.555*
	Sig. (2-tailed)	.217	.066	.217	.556	.660	.066	.217	.008	1.000	.196		.028	.669	.556	.660	.217	.508	.000	.288	.288	.011
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 12	Pearson Correlation	.404	.279	.061	.216	-.015	-.015	.404	.404	.061	.183	.490*	1	.229	.216	-.015	.061	.279	.404	.327	-.210	.467*
	Sig. (2-tailed)	.077	.234	.735	.361	.951	.951	.077	.077	.735	.440	.028		.332	.361	.951	.735	.234	.077	.160	.374	.038
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 13	Pearson Correlation	.471	.043	.471	.057	.257	.043	.236	.000	.236	.492*	.182	.229	1	.057	.257	.236	.609**	.000	.609**	.357	.593**
	Sig. (2-tailed)	.036	.858	.036	.811	.274	.858	.317	1.000	.317	.027	.669	.332		.811	.274	.317	.003	1.000	.074	.122	.006
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 14	Pearson Correlation	.061	.279	-.243	.618**	.279	.572**	.404	.061	.404	.183	.140	.216	-.057	1	.279	.404	-.308	.061	-.140	.497*	.467*
	Sig. (2-tailed)	.735	.234	.303	.004	.234	.008	.077	.735	.077	.440	.556	.361	.811		.234	.077	.186	.735	.556	.028	.038
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 15	Pearson Correlation	.061	.341	.061	.279	.560*	.121	.303	-.182	.545*	.179	-.105	-.015	.257	.279	1	.061	.121	-.182	.454*	.419	.468*
	Sig. (2-tailed)	.800	.142	.800	.234	.010	.612	.195	.444	.013	.450	.660	.951	.274	.234		.800	.612	.444	.044	.066	.037
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 16	Pearson Correlation	.200	.061	.200	.404	.061	.545*	.200	.467*	-.067	.174	.399	.061	.236	.404	.061	1	.061	.200	.182	.577**	.532*
	Sig. (2-tailed)	.398	.800	.398	.077	.800	.013	.398	.038	.780	.463	.217	.735	.317	.077	.800		.800	.398	.416	.008	.016
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 17	Pearson Correlation	.545*	.121	.545*	-.015	.121	-.099	.061	.061	.061	.390	.157	.279	.609**	-.308	.121	.061	1	.061	.454*	.157	.497*
	Sig. (2-tailed)	.013	.612	.013	.951	.612	.678	.800	.800	.800	.089	.508	.234	.003	.186	.612	.800		.800	.044	.508	.027
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 18	Pearson Correlation	.200	.303	.200	.061	.061	.303	.200	.733**	-.067	.174	.866**	.404	.000	.061	-.182	.200	.061	1	.182	-.269	.450*
	Sig. (2-tailed)	.398	.195	.398	.735	.800	.195	.398	.000	.780	.463	.000	.077	1.000	.735	.444	.398	.800		.416	.217	.046
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 19	Pearson Correlation	.182	.105	.577**	.327	.454*	-.245	.182	.182	.182	.034	.250	.327	.609**	-.140	.454*	.182	.454*	.182	1	.250	.526*
	Sig. (2-tailed)	.416	.660	.008	.160	.044	.299	.416	.416	.416	.888	.288	.160	.074	.556	.044	.416	.044	.416		.288	.017
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Skor Soal Nomor 20	Pearson Correlation	.000	-.105	.269	.490*	.419	.419	.000	.000	.269	.302	-.250	-.210	.357	.490*	.419	.577**	.157	-.269	.250	1	.467*
	Sig. (2-tailed)	1.000	.660	.217	.028	.066	.066	1.000	1.000	.217	.196	.288	.374	.122	.028	.066	.008	.508	.217	.288		.038
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Total Nilai	Pearson Correlation	.450*	.468*	.450*	.467*	.518*	.468*	.505*	.450*	.505*	.553*	.555*	.467*	.593**	.467*	.468*	.532*	.497*	.450*	.526*	.467*	1
	Sig. (2-tailed)	.046	.037	.046	.038	.019	.037	.023	.046	.023	.011	.011	.038	.006	.038	.037	.016	.027	.046	.017	.038	
	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

To test the validity in every number of questions are by using r-table. In this research, the researcher used significant level 5% or 0.05 with n-2 (20-2=18). The r-table in this below:

Figure 3.10

The r Table

Tabel r untuk df = 1 - 50

df = (N-2)	Tingkat signifikansi untuk uji satu arah				
	0.05	0.025	0.01	0.005	0.0005
	Tingkat signifikansi untuk uji dua arah				
	0.1	0.05	0.02	0.01	0.001
1	0.9877	0.9969	0.9995	0.9999	1.0000
2	0.9000	0.9500	0.9800	0.9900	0.9990
3	0.8054	0.8783	0.9343	0.9587	0.9911
4	0.7293	0.8114	0.8822	0.9172	0.9741
5	0.6694	0.7545	0.8329	0.8745	0.9509
6	0.6215	0.7067	0.7887	0.8343	0.9249
7	0.5822	0.6664	0.7498	0.7977	0.8983
8	0.5494	0.6319	0.7155	0.7646	0.8721
9	0.5214	0.6021	0.6851	0.7348	0.8470
10	0.4973	0.5760	0.6581	0.7079	0.8233
11	0.4762	0.5529	0.6339	0.6835	0.8010
12	0.4575	0.5324	0.6120	0.6614	0.7800
13	0.4409	0.5140	0.5923	0.6411	0.7604
14	0.4259	0.4973	0.5742	0.6226	0.7419
15	0.4124	0.4821	0.5577	0.6055	0.7247
16	0.4000	0.4683	0.5425	0.5897	0.7084
17	0.3887	0.4555	0.5285	0.5751	0.6932
18	0.3783	0.4438	0.5155	0.5614	0.6788
19	0.3687	0.4329	0.5034	0.5487	0.6652
20	0.3598	0.4227	0.4921	0.5368	0.6524
21	0.3515	0.4132	0.4815	0.5256	0.6402
22	0.3438	0.4044	0.4716	0.5151	0.6287
23	0.3365	0.3961	0.4622	0.5052	0.6178
24	0.3297	0.3882	0.4534	0.4958	0.6074
25	0.3233	0.3809	0.4451	0.4869	0.5974
26	0.3172	0.3739	0.4372	0.4785	0.5880
27	0.3115	0.3673	0.4297	0.4705	0.5790
28	0.3061	0.3610	0.4226	0.4629	0.5703
29	0.3009	0.3550	0.4158	0.4556	0.5620
30	0.2960	0.3494	0.4093	0.4487	0.5541
31	0.2913	0.3440	0.4032	0.4421	0.5465
32	0.2869	0.3388	0.3972	0.4357	0.5392
33	0.2826	0.3338	0.3916	0.4296	0.5322
34	0.2785	0.3291	0.3862	0.4238	0.5254
35	0.2746	0.3246	0.3810	0.4182	0.5189
36	0.2709	0.3202	0.3760	0.4128	0.5126
37	0.2673	0.3160	0.3712	0.4076	0.5066
38	0.2638	0.3120	0.3665	0.4026	0.5007
39	0.2605	0.3081	0.3621	0.3978	0.4950
40	0.2573	0.3044	0.3578	0.3932	0.4896
41	0.2542	0.3008	0.3536	0.3887	0.4843
42	0.2512	0.2973	0.3496	0.3843	0.4791
43	0.2483	0.2940	0.3457	0.3801	0.4742
44	0.2455	0.2907	0.3420	0.3761	0.4694
45	0.2429	0.2876	0.3384	0.3721	0.4647
46	0.2403	0.2845	0.3348	0.3683	0.4601
47	0.2377	0.2816	0.3314	0.3646	0.4557
48	0.2353	0.2787	0.3281	0.3610	0.4514
49	0.2329	0.2759	0.3249	0.3575	0.4473
50	0.2306	0.2732	0.3218	0.3542	0.4432

So, the r value of the table is 0.4438 or 0.444. All items are valid.

The data in this below:

Table 3.4

The Data of Validity the Reading Comprehension

Number 1	0.450 > 0.444 – Valid
Number 2	0.468 > 0.444 – Valid
Number 3	0.450 > 0.444 – Valid
Number 4	0.467 > 0.444 – Valid
Number 5	0.518 > 0.444 – Valid
Number 6	0.468 > 0.444 – Valid
Number 7	0.505 > 0.444 – Valid
Number 8	0.450 > 0.444 – Valid
Number 9	0.505 > 0.444 – Valid
Number 10	0.553 > 0.444 – Valid
Number 11	0.555 > 0.444 – Valid
Number 12	0.467 > 0.444 – Valid
Number 13	0.593 > 0.444 – Valid
Number 14	0.467 > 0.444 – Valid
Number 15	0.468 > 0.444 – Valid
Number 16	0.532 > 0.444 – Valid
Number 17	0.493 > 0.444 – Valid
Number 18	0.450 > 0.444 – Valid
Number 19	0.528 > 0.444 – Valid
Number 20	0.467 > 0.444 – Valid

b. Reliability Test

Surahman, et al (2016:8) reliability is used to show the extent to which a measurement result is relatively consistent if the measurement is repeated to the same subject even though by different participant, different times and different places, it was gave the same results. The level of reliability of an instrument is decided through value correlation coefficient between the items in the instrument which is denoted by *r*. Karunia and Yudhanegara (2007: 206) state standards reliability coefficient in this below:

Table 3.5

Index Reliability

Index Reliability	
$0{,}90 \leq r \leq 1{,}00$	Perfect Reliability
$0{,}70 \leq r < 0{,}90$	Reliability
$0{,}40 \leq r < 0{,}70$	Moderate Reliability
$0{,}20 \leq r < 0{,}40$	Low Reliability
$r < 0{,}20$	Very Low Reliability

Karunia and Yudhanegara: 206

The formula of reliability instrument test was formula *Alpha Cronbach* where can be seen:

$$r_{11} = \left(\frac{n}{n-1}\right)\left(1 - \frac{\sum s_i^2}{s_t^2}\right)$$

Explanation

r = reliability coefficient

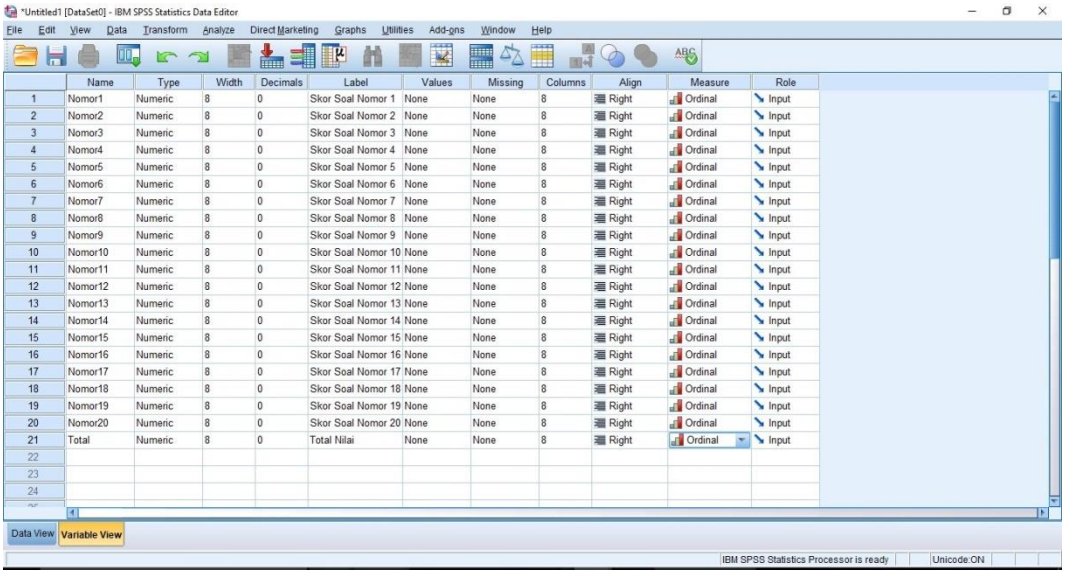
n = the amount of data

s_i^2 = Variation in the score item

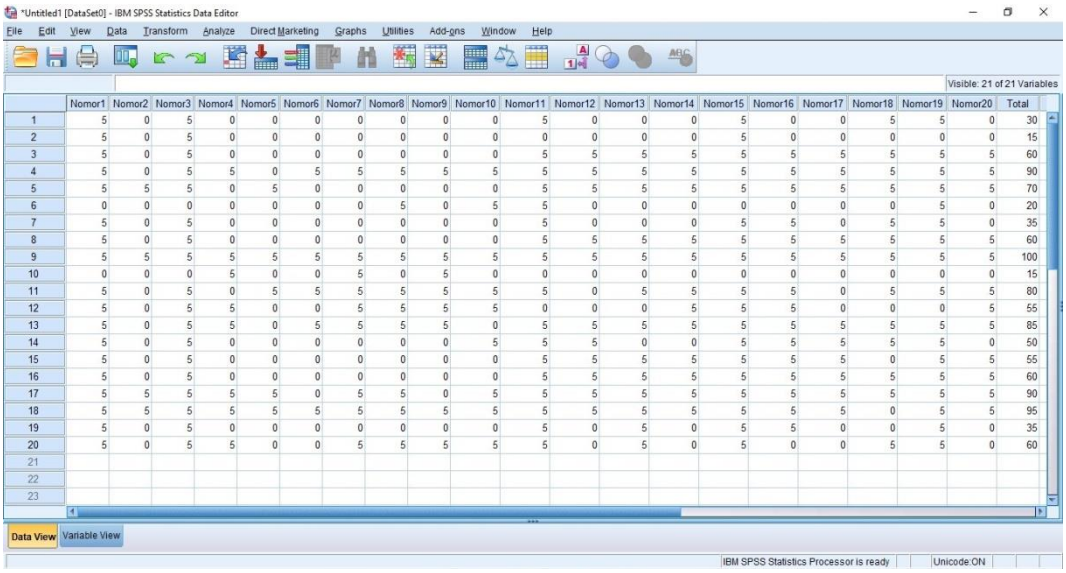
s_t^2 = Variation in the score all items

The researcher applied SPSS 23.0 to analyze reliability vocabulary mastery. Steps reliability as follows:

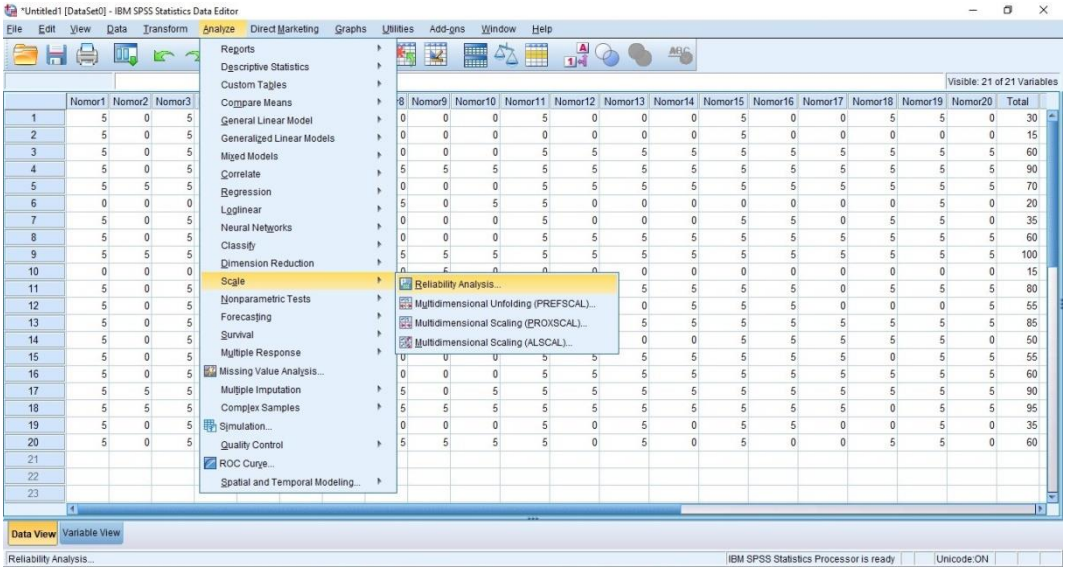
1) Open SPSS 23.0.
2) In variable view create name of column in first line “Nomor1” and so on.



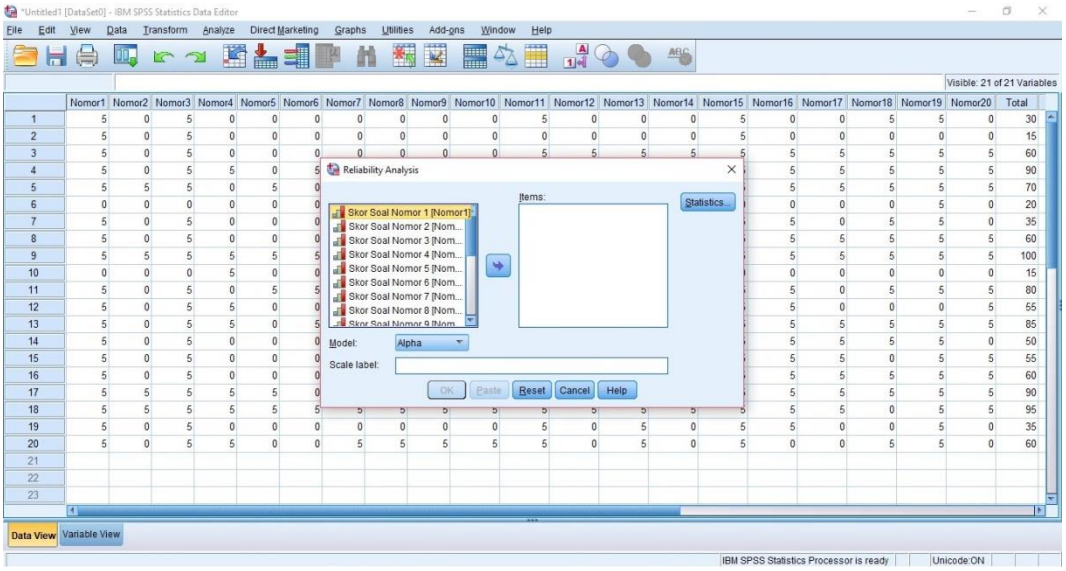
3) Entered data in data view.



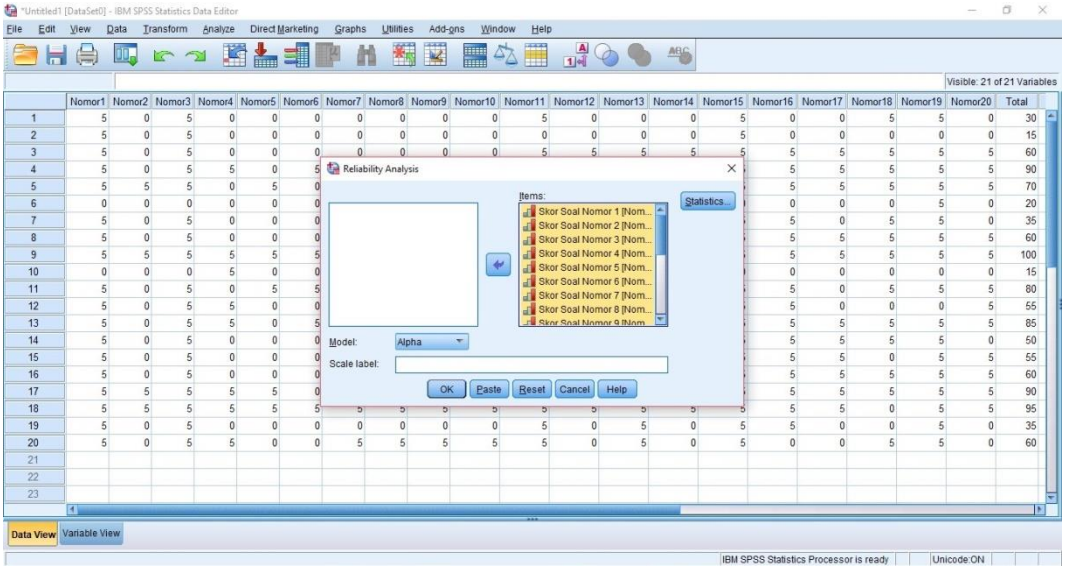
4) Choose Analyze → Scale → Reliability Analysis



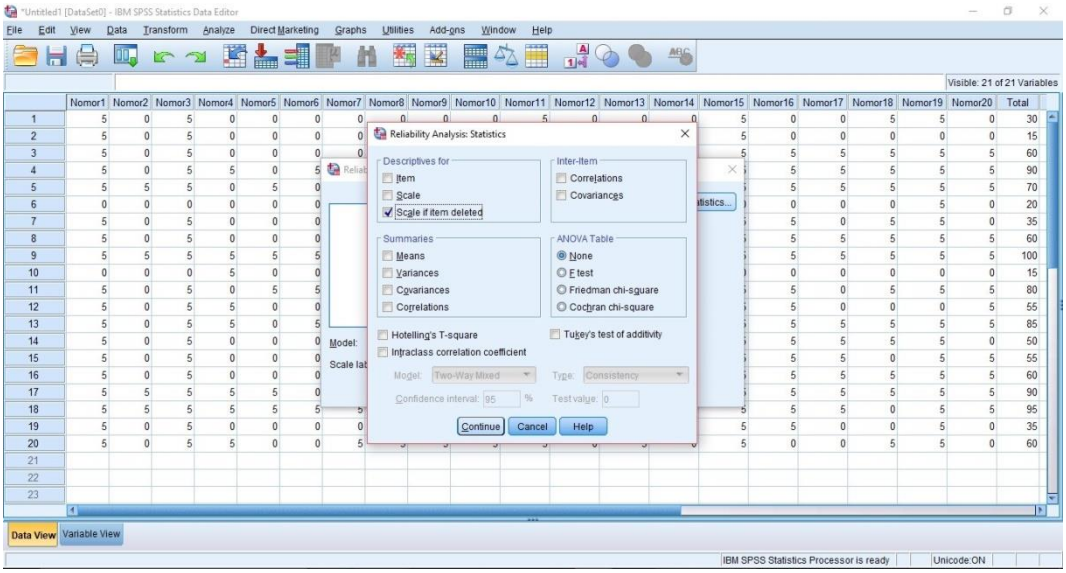
5) Click Model → Alpha



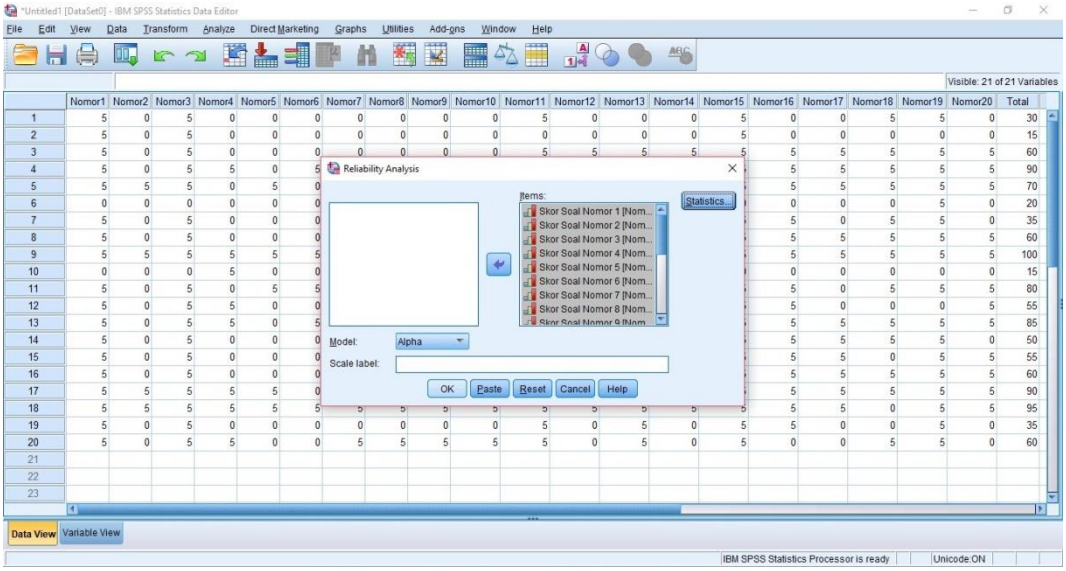
6) Move the data to the right column



7) Click Statistics → Scale if Item Deleted → None → Continue



8) Click Ok



9) Result the Case Processing Summary

Figure 3.11

Case Processing Summary of Vocabulary Mastery

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

10) The result of the Reliability Statistics

Figure 3.12

Reliability Statistics of Vocabulary Mastery

Reliability Statistics

Cronbach's Alpha	N of Items
.750	21

11) Result of Item-Total Statistics

Figure 3.13

Item-Total Statistics of Vocabulary Mastery

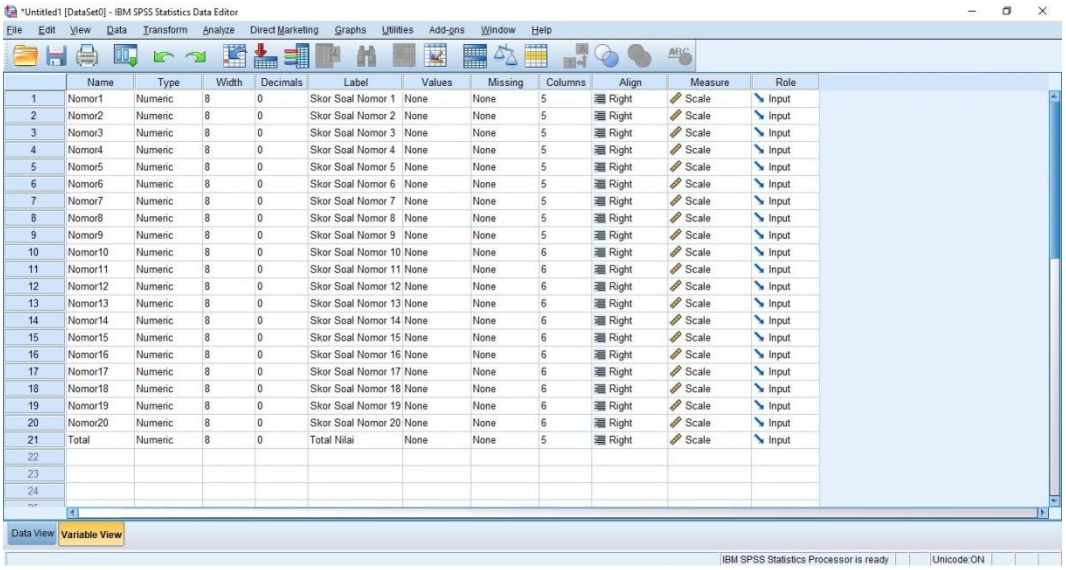
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Skor Soal Nomor 1	111.50	2784.474	.496	.744
Skor Soal Nomor 2	115.00	2742.105	.563	.740
Skor Soal Nomor 3	111.50	2784.474	.496	.744
Skor Soal Nomor 4	114.00	2741.053	.456	.740
Skor Soal Nomor 5	114.75	2719.671	.616	.737
Skor Soal Nomor 6	114.75	2703.882	.686	.736
Skor Soal Nomor 7	113.75	2718.092	.536	.738
Skor Soal Nomor 8	113.75	2712.829	.557	.737
Skor Soal Nomor 9	114.00	2751.579	.415	.742
Skor Soal Nomor 10	113.75	2749.671	.415	.741
Skor Soal Nomor 11	111.75	2777.039	.451	.743
Skor Soal Nomor 12	113.25	2687.566	.655	.734
Skor Soal Nomor 13	112.75	2677.566	.726	.733
Skor Soal Nomor 14	113.00	2658.947	.780	.731
Skor Soal Nomor 15	111.50	2784.474	.496	.744
Skor Soal Nomor 16	112.25	2714.408	.640	.737
Skor Soal Nomor 17	113.25	2687.566	.655	.734
Skor Soal Nomor 18	112.75	2751.250	.429	.741
Skor Soal Nomor 19	111.75	2777.039	.451	.743
Skor Soal Nomor 20	113.00	2658.947	.780	.731
Total Nilai	58.00	716.842	1.000	.902

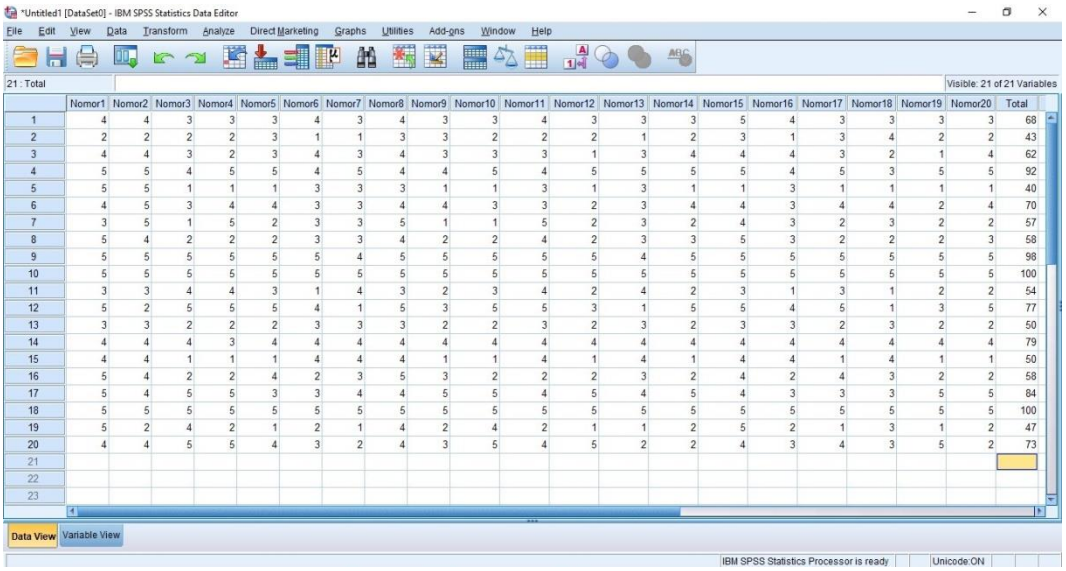
The researcher applied SPSS 23.0 to analyze reliability learning motivation. Steps reliability test as follows:

1) Open SPSS 23.0.

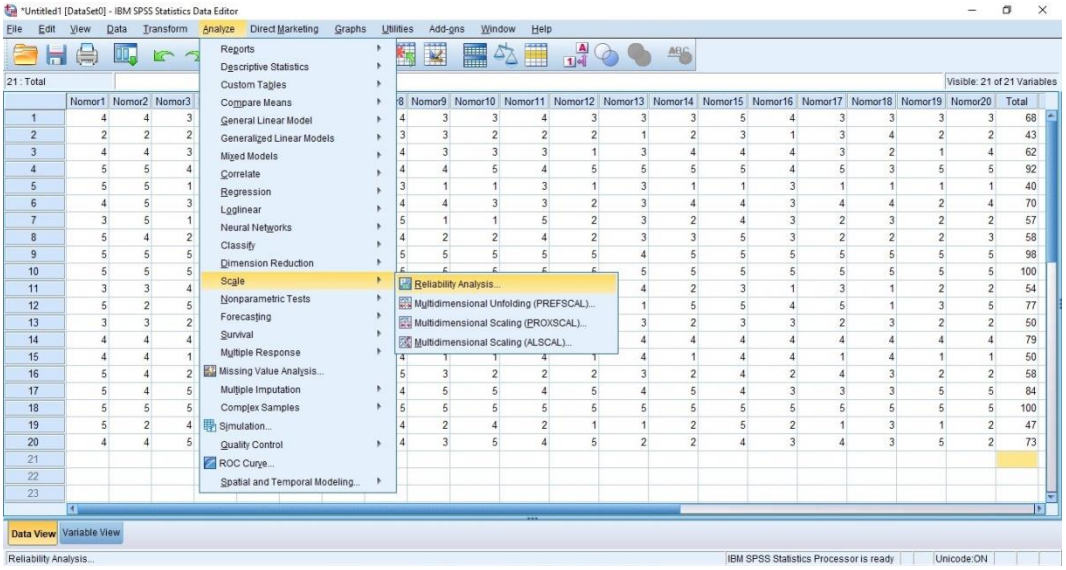
2) In variable view create name of column in first line “Nomor1” and so on.



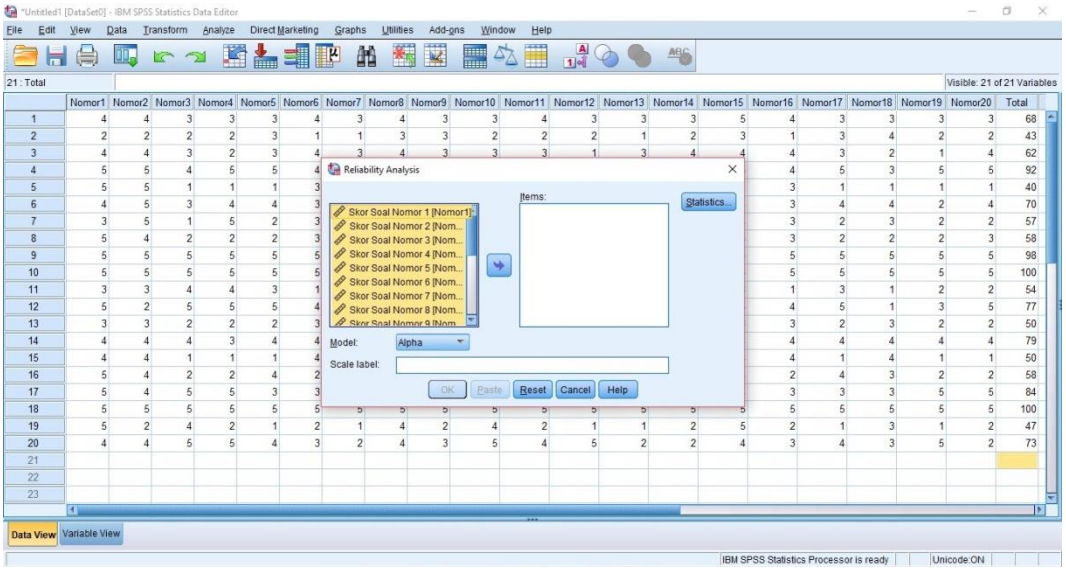
3) Entered data in data view.



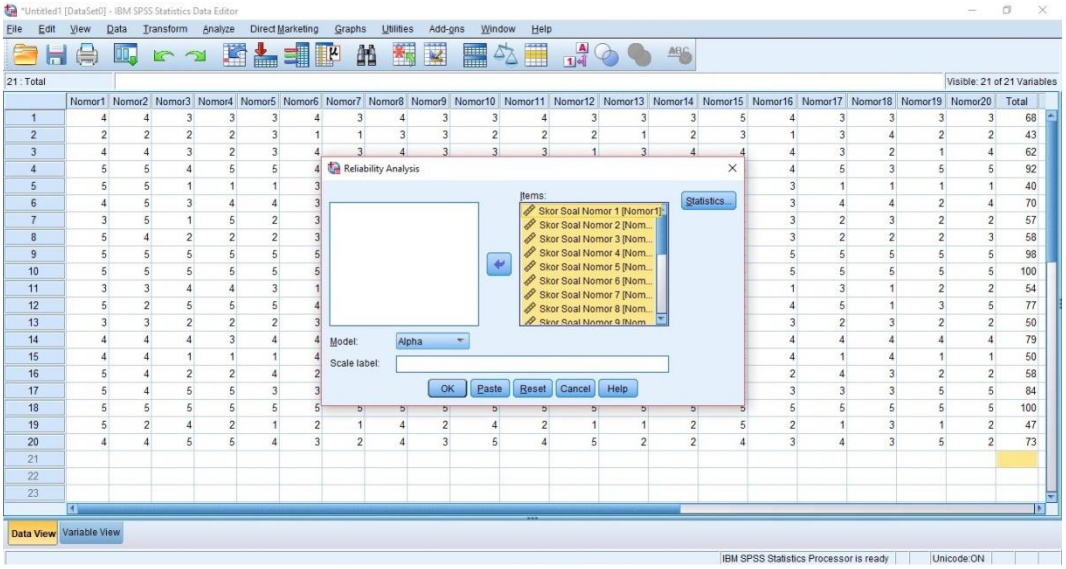
4) Choose Analyze → Scale → Reliability Analysis



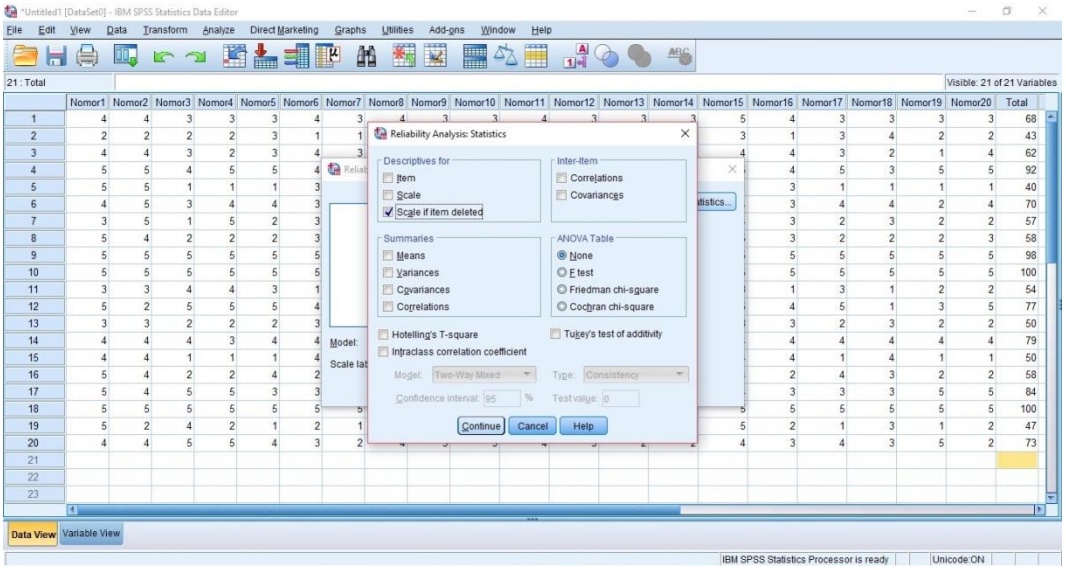
5) Click Model → Alpha



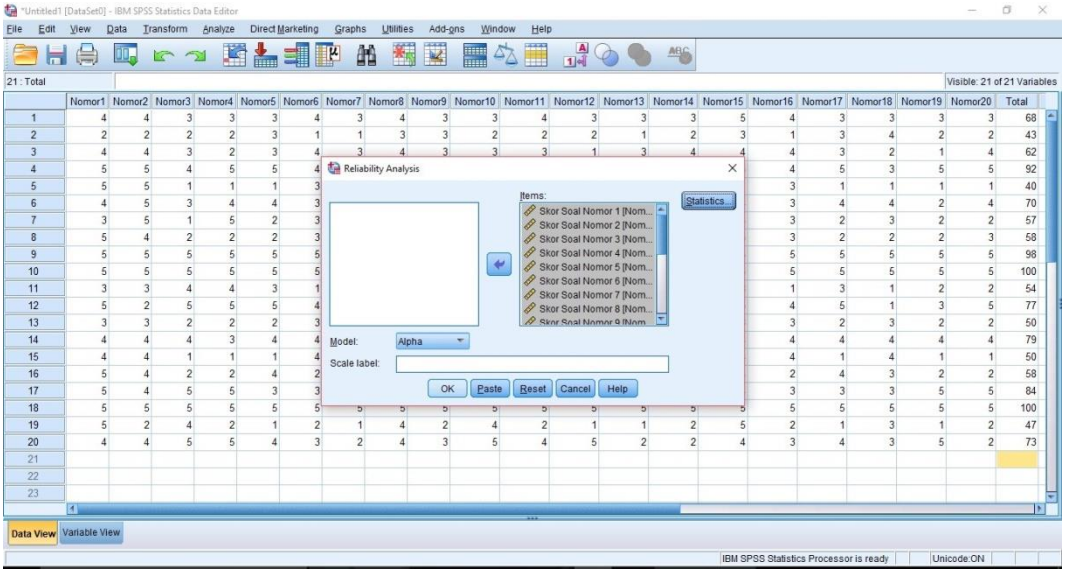
6) Move the data to the right column



7) Click Statistics → Scale if Item Deleted → None → Continue



8) Click OK



9) Result the Case Processing Summary

Figure 3.14

Case Processing Summary of Learning Motivation

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

10) The Result of Reliability Statistics

Figure 3.15

Reliability Statistics of Learning Motivation

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

11) The Result of Item-Total Statistics

Figure 3.16

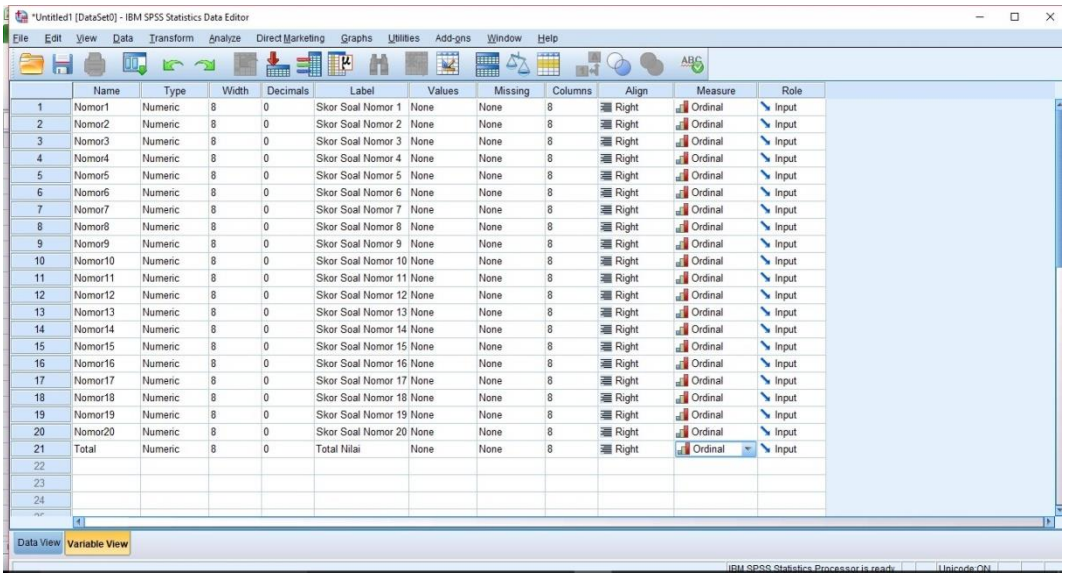
Item-Total Statistics of Learning Motivation

Item-Total Statistics

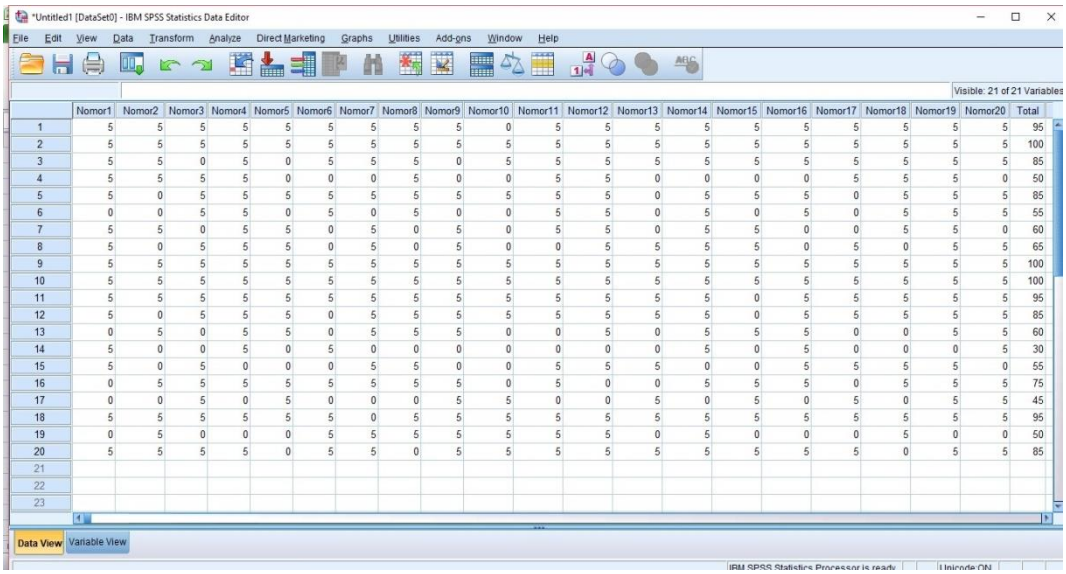
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Skor Soal Nomor 1	131.75	1452.408	.483	.759
Skor Soal Nomor 2	132.05	1448.471	.465	.759
Skor Soal Nomor 3	132.70	1399.484	.763	.749
Skor Soal Nomor 4	132.60	1395.621	.774	.748
Skor Soal Nomor 5	132.75	1397.145	.831	.748
Skor Soal Nomor 6	132.70	1421.379	.723	.753
Skor Soal Nomor 7	132.80	1431.432	.573	.755
Skor Soal Nomor 8	131.90	1452.095	.623	.759
Skor Soal Nomor 9	132.95	1397.208	.865	.748
Skor Soal Nomor 10	132.70	1391.589	.816	.748
Skor Soal Nomor 11	132.25	1434.303	.666	.756
Skor Soal Nomor 12	133.10	1379.568	.888	.745
Skor Soal Nomor 13	132.80	1431.432	.573	.755
Skor Soal Nomor 14	132.80	1388.063	.880	.747
Skor Soal Nomor 15	131.90	1437.884	.618	.756
Skor Soal Nomor 16	132.70	1421.379	.723	.753
Skor Soal Nomor 17	132.75	1397.145	.831	.748
Skor Soal Nomor 18	132.90	1437.779	.499	.757
Skor Soal Nomor 19	133.10	1379.568	.888	.745
Skor Soal Nomor 20	132.80	1388.063	.880	.747
Total Nilai	68.00	371.684	1.000	.956

The researcher applied *SPSS 23.0* to analyze reliability reading comprehension. Steps reliability test as follows:

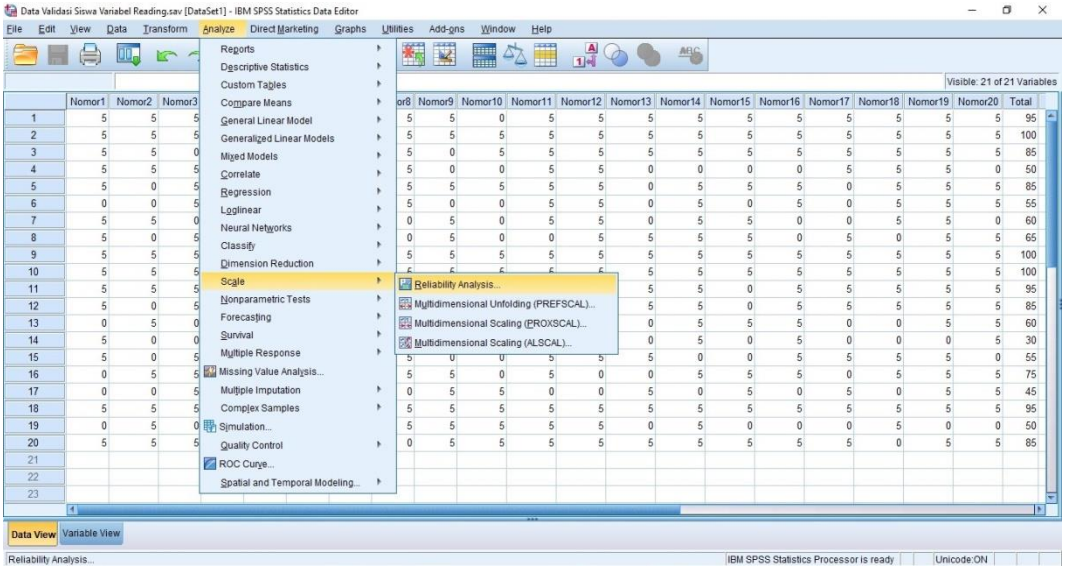
1) Open SPSS 23.0.
2) In variable view create name column in first line “Nomor1” and so on until the last create name of column in the twenty one lines “Total”.



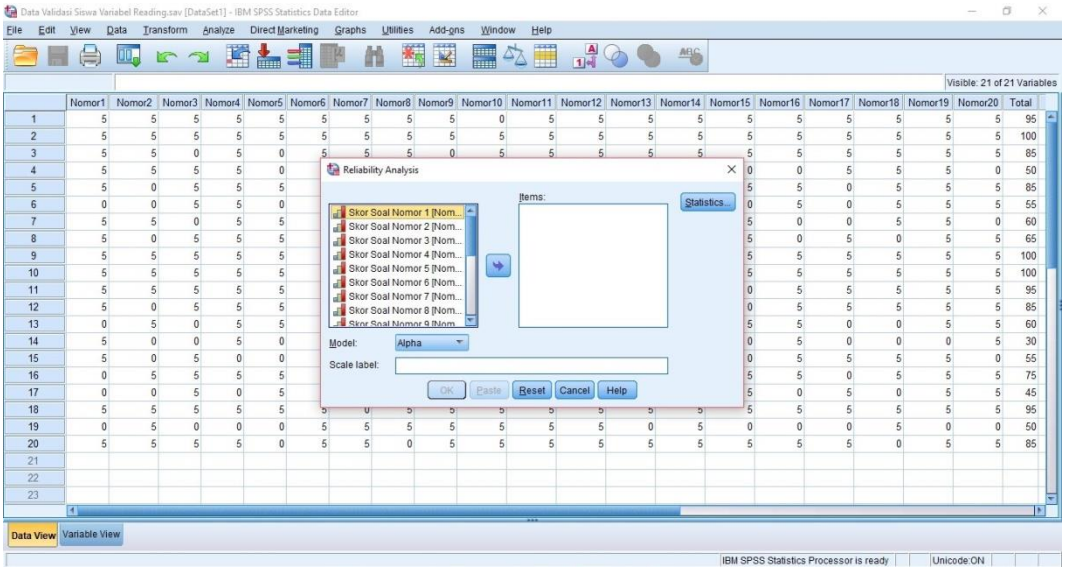
3) Entered data in data view.



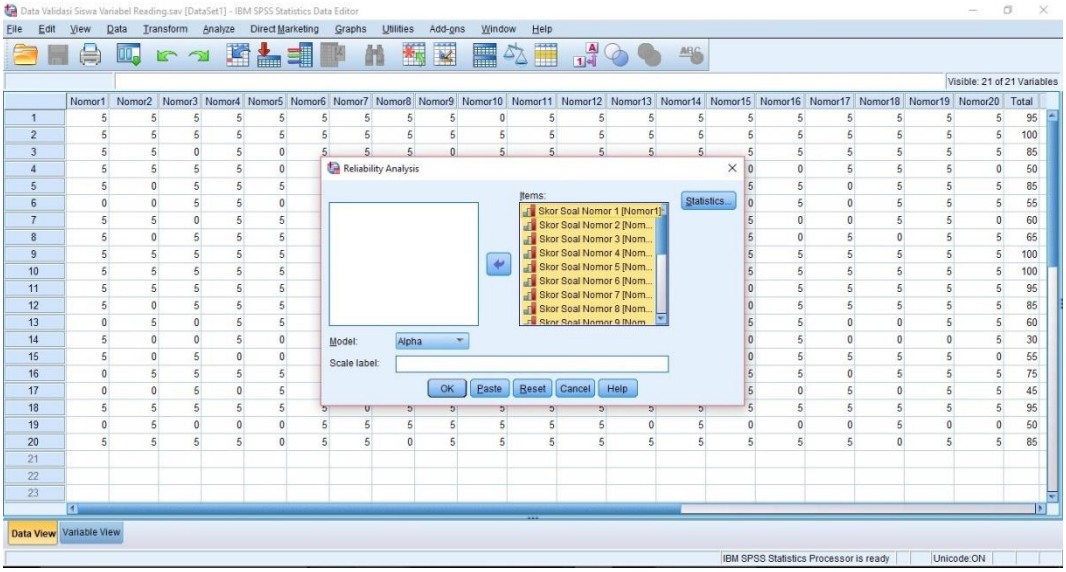
4) Choose Analyze → Scale → Reliability Analysis



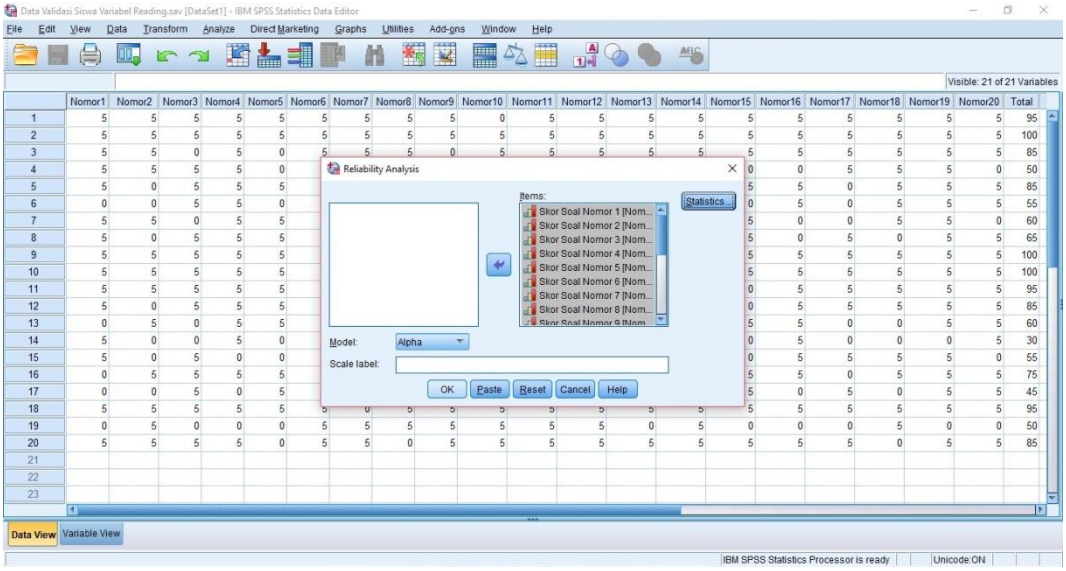
5) Click Model → Alpha



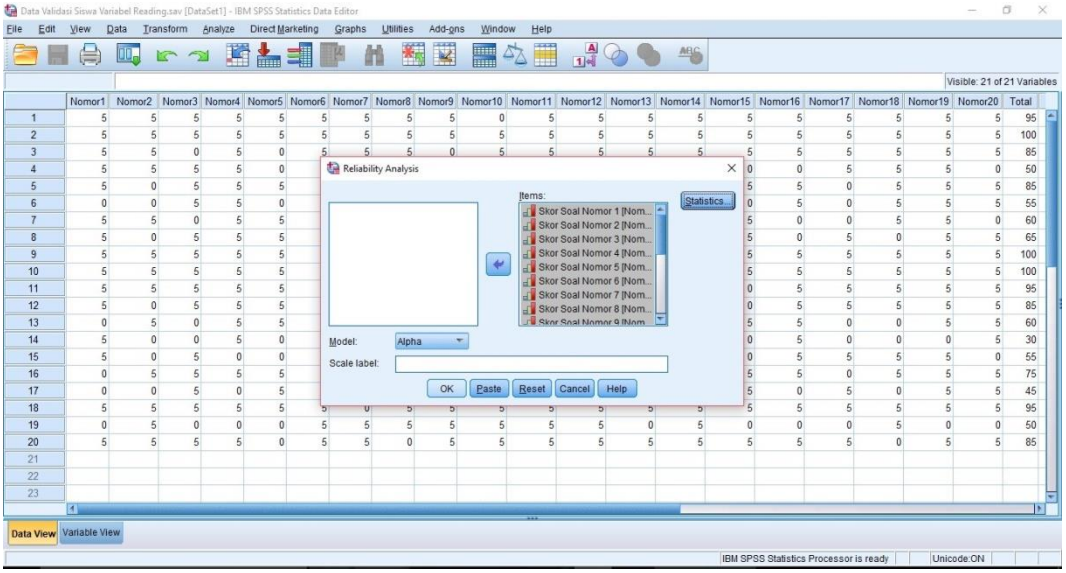
6) Move the data to the right column



7) Click Statistics → Scale if Item Deleted → None → Continue



8) Click OK



9) Result Case Processing Summary

Figure 3.17

Case Processing Summary of Reading Comprehension

Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

10) The result of Reliability Statistics

Figure 3.18

Reliability Statistics of Reading Comprehension

Reliability Statistics

Cronbach's Alpha	N of Items
.733	21

11) The result of Item-Total Statistics

Figure 3.19

Item-Total Statistical of Reading Comprehension

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Skor Soal Nomor 1	143.25	1803.355	.408	.723
Skor Soal Nomor 2	143.75	1791.776	.422	.722
Skor Soal Nomor 3	143.25	1803.355	.408	.723
Skor Soal Nomor 4	142.75	1814.408	.433	.724
Skor Soal Nomor 5	143.75	1781.250	.475	.720
Skor Soal Nomor 6	143.75	1791.776	.422	.722
Skor Soal Nomor 7	143.25	1792.829	.465	.721
Skor Soal Nomor 8	143.25	1803.355	.408	.723
Skor Soal Nomor 9	143.25	1792.829	.465	.721
Skor Soal Nomor 10	144.25	1769.145	.511	.718
Skor Soal Nomor 11	143.00	1790.526	.521	.720
Skor Soal Nomor 12	142.75	1814.408	.433	.724
Skor Soal Nomor 13	144.00	1762.105	.554	.716
Skor Soal Nomor 14	142.75	1814.408	.433	.724
Skor Soal Nomor 15	143.75	1791.776	.422	.722
Skor Soal Nomor 16	143.25	1787.566	.494	.720
Skor Soal Nomor 17	143.75	1786.513	.448	.721
Skor Soal Nomor 18	143.25	1803.355	.408	.723
Skor Soal Nomor 19	142.50	1817.105	.501	.724
Skor Soal Nomor 20	143.00	1806.316	.428	.723
Total Nilai	73.50	471.316	1.000	.833

c. Item Discrimination

Karunia and Yudhanegara (2007: 206) state that the criteria of item discrimination are as follows:

Table 3.6

Interpretation of Item Discrimination

Value	Explanation
0,70 < D ≤ 1,00	Very good
0,40 < D ≤ 0,70	Good
0,20 < D ≤ 0,40	Moderate
0,00 < D ≤ 0,20	Bad
DP ≤ 0,00	Very bad

Karunia and Yudhanegara: 217

The formula of item discrimination as follows:

$$D = \frac{\overline{B_a} - \overline{B_b}}{B_{max}}$$

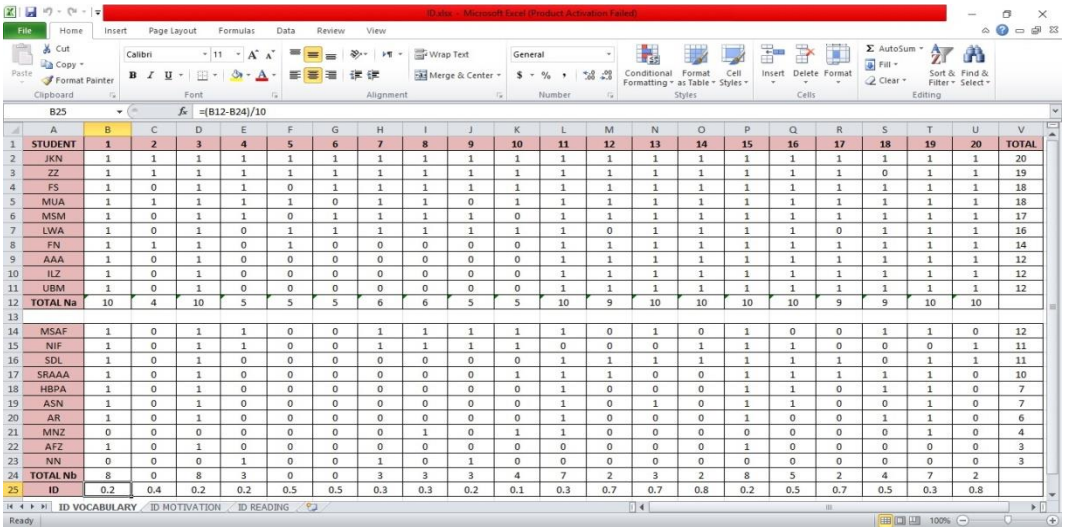
Explanation:

$\overline{B_a}$ = Average score higher group

$\overline{B_b}$ = Average score smaller group

B_{max} = Maximum score on the scoring guidelines

The data of Item Discrimination of Vocabulary Mastery are in this below:



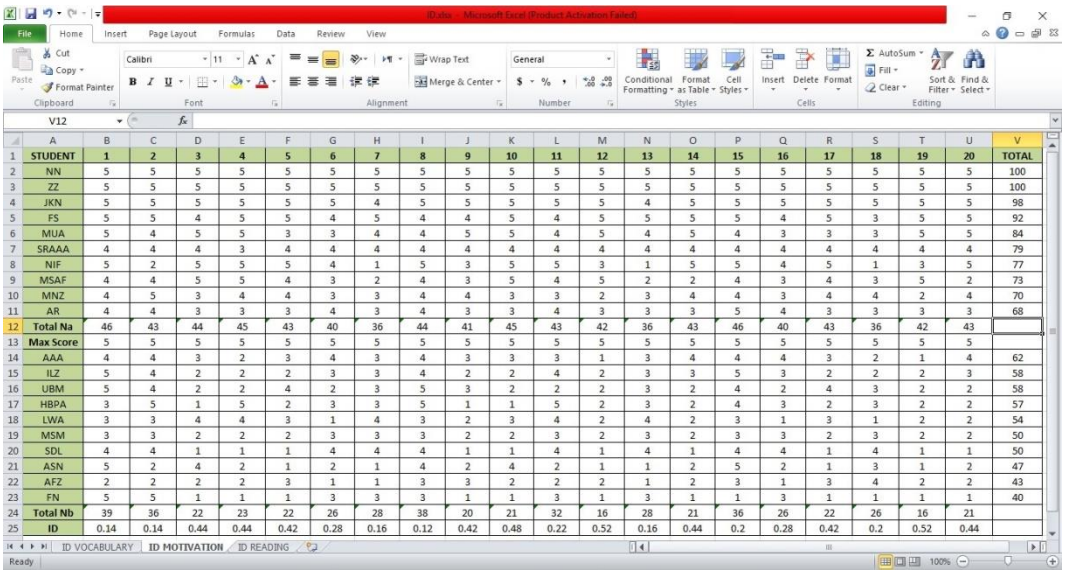
STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
JKN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
ZZ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	19
FS	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
MUA	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	18
MSM	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	17
LWA	1	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	16
FN	1	1	1	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	14
AAA	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
ILZ	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
UBM	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
TOTAL Na	10	4	10	5	5	5	6	6	5	5	10	9	10	10	10	10	9	9	10	10	
MSAF	1	0	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	1	0	12
NIF	1	0	1	1	0	0	1	1	1	1	0	0	0	1	1	1	0	0	0	1	11
SDL	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	11
SRAAA	1	0	1	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1	1	0	10
HBPA	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	1	0	7
ASN	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	1	0	7
AR	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	6
MNZ	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	4
AFZ	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
NN	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL Nb	8	0	8	3	0	0	3	3	3	4	7	2	3	2	8	5	2	4	7	2	
ID	0.2	0.4	0.2	0.2	0.5	0.5	0.3	0.3	0.2	0.1	0.3	0.7	0.7	0.8	0.2	0.5	0.7	0.5	0.3	0.8	

Table 3.7

The Item Discrimination Data of Vocabulary Mastery

Number 1	0,2 – Bad
Number 2	0,4 – Good
Number 3	0,2 – Bad
Number 4	0,2 – Bad
Number 5	0,5 – Good
Number 6	0,5 – Good
Number 7	0,3 – Moderate
Number 8	0,3 – Moderate
Number 9	0,2 – Bad
Number 10	0,1 – Bad
Number 11	0,3 – Moderate
Number 12	0,7 – Good
Number 13	0,7 – Good
Number 14	0,8 – Very Good
Number 15	0,2 – Bad
Number 16	0,5 – Good
Number 17	0,7 – Good
Number 18	0,5 – Good
Number 19	0,3 – Moderate
Number 20	0,8 – Very Good

The data of Item Discrimination of Learning Motivation are in this below:



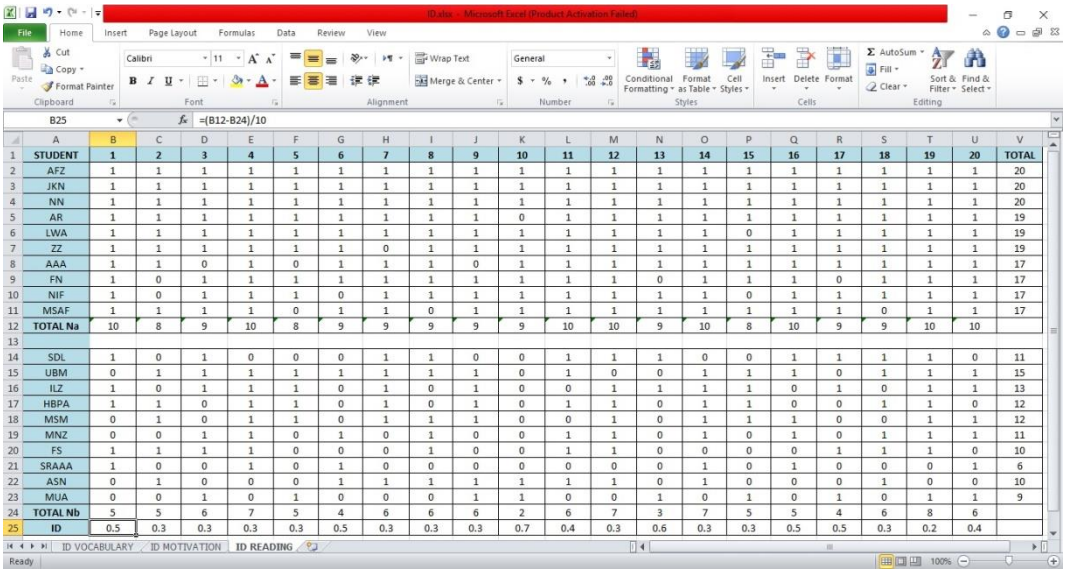
STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
NN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
ZZ	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
JKN	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	98
FS	5	5	4	5	5	4	5	4	4	5	4	5	5	5	5	4	5	3	5	5	92
MUA	5	4	5	5	3	3	4	4	5	5	4	5	4	5	4	3	3	3	5	5	84
SRAAA	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	79
NIF	5	2	5	5	5	4	1	5	3	5	5	3	1	5	5	4	5	1	3	5	77
MSAF	4	4	5	5	4	3	2	4	3	5	4	5	2	2	4	3	4	3	5	2	73
MNZ	4	5	3	4	4	3	3	4	4	3	3	2	3	4	4	3	4	4	2	4	70
AR	4	4	3	3	3	4	3	4	3	3	4	3	3	3	5	4	3	3	3	3	68
Total Na	46	43	44	45	43	40	36	44	41	45	43	42	36	43	46	40	43	36	42	43	
Max Score	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
AAA	4	4	3	2	3	4	3	4	3	3	3	1	3	4	4	4	3	2	1	4	62
ILZ	5	4	2	2	2	3	3	4	2	2	4	2	3	3	5	3	2	2	2	3	58
UBM	5	4	2	2	4	2	3	5	3	2	2	2	3	2	4	2	4	3	2	2	58
HBPA	3	5	1	5	2	3	3	5	1	1	5	2	3	2	4	3	2	3	2	2	57
LWA	3	3	4	4	3	1	4	3	2	3	4	2	4	2	3	1	3	1	2	2	54
MSM	3	3	2	2	2	3	3	3	2	2	3	2	3	2	3	3	2	3	2	2	50
SDL	4	4	1	1	1	4	4	4	1	1	4	1	4	1	4	4	1	4	1	1	50
ASN	5	2	4	2	1	2	1	4	2	4	2	1	1	2	5	2	1	3	1	2	47
AFZ	2	2	2	2	3	1	1	3	3	2	2	2	1	2	3	1	3	4	2	2	43
FN	5	5	1	1	1	3	3	3	1	1	3	1	3	1	1	3	1	1	1	1	40
Total Nb	39	36	22	23	22	26	28	38	20	21	32	16	28	21	36	26	22	26	16	21	
ID	0.14	0.14	0.44	0.44	0.42	0.28	0.16	0.12	0.42	0.48	0.22	0.52	0.16	0.44	0.2	0.28	0.42	0.2	0.52	0.44	

Table 3.8

The Item Discrimination Data of Learning Motivation

Number 1	0,14 – Bad
Number 2	0,14 – Bad
Number 3	0,44 – Good
Number 4	0,44 – Good
Number 5	0,42 – Good
Number 6	0,28 – Moderate
Number 7	0,16 – Bad
Number 8	0,12 – Bad
Number 9	0,42 – Good
Number 10	0,48 – Good
Number 11	0,22 – Moderate
Number 12	0,52 – Good
Number 13	0,16 – Bad
Number 14	0,44 – Good
Number 15	0,2 – Bad
Number 16	0,28 – Moderate
Number 17	0,42 – Good
Number 18	0,2 – Bad
Number 19	0,52 – Good
Number 20	0,44 – Good

The data of Item Discrimination of Reading Comprehension are in this below:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
2	AFZ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
3	JKN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
4	NN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
5	AR	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	19
6	LWA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	19
7	ZZ	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	19
8	AAA	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	17
9	FN	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	17
10	NIF	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	17
11	MSAF	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	17
12	TOTAL Na	10	8	9	10	8	9	9	9	9	9	10	10	9	10	8	10	9	9	10	10	
13																						
14	SDL	1	0	1	0	0	0	1	1	0	0	1	1	1	0	0	1	1	1	1	0	11
15	UBM	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	15
16	ILZ	1	0	1	1	1	0	1	0	1	0	0	1	1	1	1	0	1	0	1	1	13
17	HBPA	1	1	0	1	1	0	1	0	1	0	1	1	0	1	1	0	0	1	1	0	12
18	MSM	0	1	0	1	1	0	1	1	1	0	0	1	0	1	1	1	0	0	1	1	12
19	MNZ	0	0	1	1	0	1	0	1	0	0	1	1	0	1	0	1	0	1	1	1	11
20	FS	1	1	1	1	0	0	0	1	0	0	1	1	0	0	0	0	1	1	1	0	10
21	SRAAA	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	6
22	ASN	0	1	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	0	10
23	MUA	0	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	1	0	1	1	9
24	TOTAL Nb	5	5	6	7	5	4	6	6	6	2	6	7	3	7	5	5	4	6	8	6	
25	ID	0.5	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.7	0.4	0.3	0.6	0.3	0.3	0.5	0.5	0.3	0.2	0.4	

Table 3.9

The Item Discrimination Data of Reading Comprehension

Number 1	0,5 – Good
Number 2	0,3 – Moderate
Number 3	0,3 – Moderate
Number 4	0,3 – Moderate
Number 5	0,3 – Moderate
Number 6	0,5 – Good
Number 7	0,3 – Moderate
Number 8	0,3 – Moderate
Number 9	0,3 – Moderate
Number 10	0,7 – Good
Number 11	0,4 – Moderate
Number 12	0,3 – Moderate
Number 13	0,6 – Good
Number 14	0,3 – Moderate
Number 15	0,3 – Moderate
Number 16	0,5 – Moderate
Number 17	0,5 – Moderate
Number 18	0,3 – Moderate
Number 19	0,2 – Bad
Number 20	0,4 – Moderate

d. Item Facility

Karunia and Yudhanegara (2007: 206) state that the criteria that state the degree of preference for each item are as follows:

Table 3.10

Interpretation of Item Facility

Value	**Explanation**
P = 0,00	Very difficult
0,00 < P ≤ 0,30	Difficult
0,30 < P ≤ 0,70	Moderate
0,70 < P ≤ 1,00	Easy
P = 1,00	Very easy

Karunia and Yudhanegara: 224

The formula of item facility as follows:

$$P = \frac{\bar{S}}{S_{max}}$$

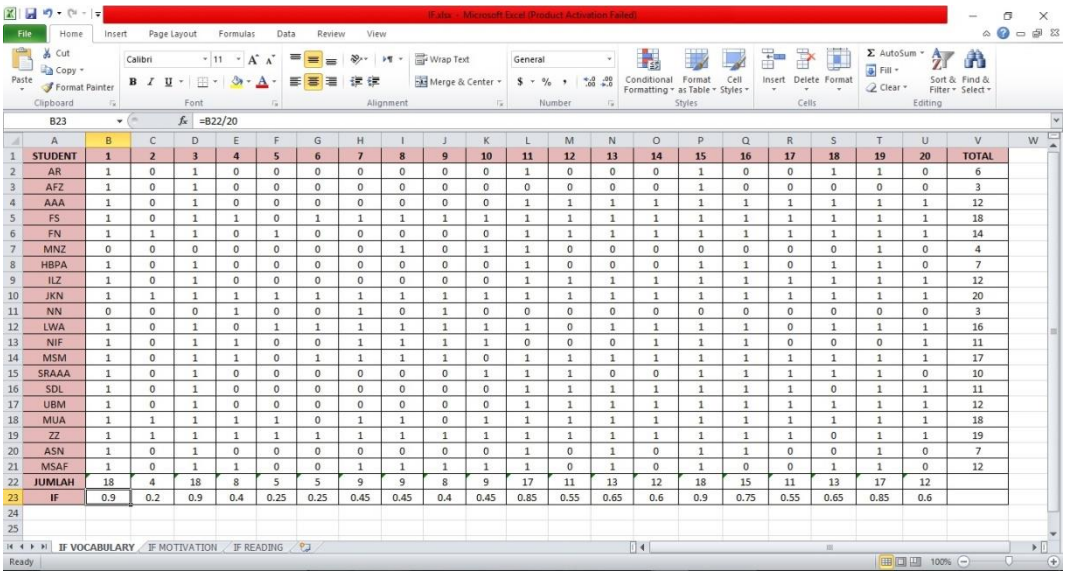
Explanation:

P = Level of difficulty

$\bar{S}$ = The average for the item

S_{max} = The maximum score for all items

The data of item facility of vocabulary mastery are in this below:



STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
AR	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	6
AFZ	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
AAA	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
FS	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18
FN	1	1	1	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	14
MNZ	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	4
HBPA	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	1	0	7
ILZ	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
JKN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
NN	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
LWA	1	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	16
NIF	1	0	1	1	0	0	1	1	1	1	0	0	0	1	1	1	0	0	0	1	11
MSM	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	17
SRAAA	1	0	1	0	0	0	0	0	0	1	1	1	0	0	1	1	1	1	1	0	10
SDL	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	11
UBM	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	12
MUA	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	18
ZZ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	19
ASN	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	1	0	7
MSAF	1	0	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	1	0	12
JUMLAH	18	4	18	8	5	5	9	9	8	9	17	11	13	12	18	15	11	13	17	12	
IF	0.9	0.2	0.9	0.4	0.25	0.25	0.45	0.45	0.4	0.45	0.85	0.55	0.65	0.6	0.9	0.75	0.55	0.65	0.85	0.6	

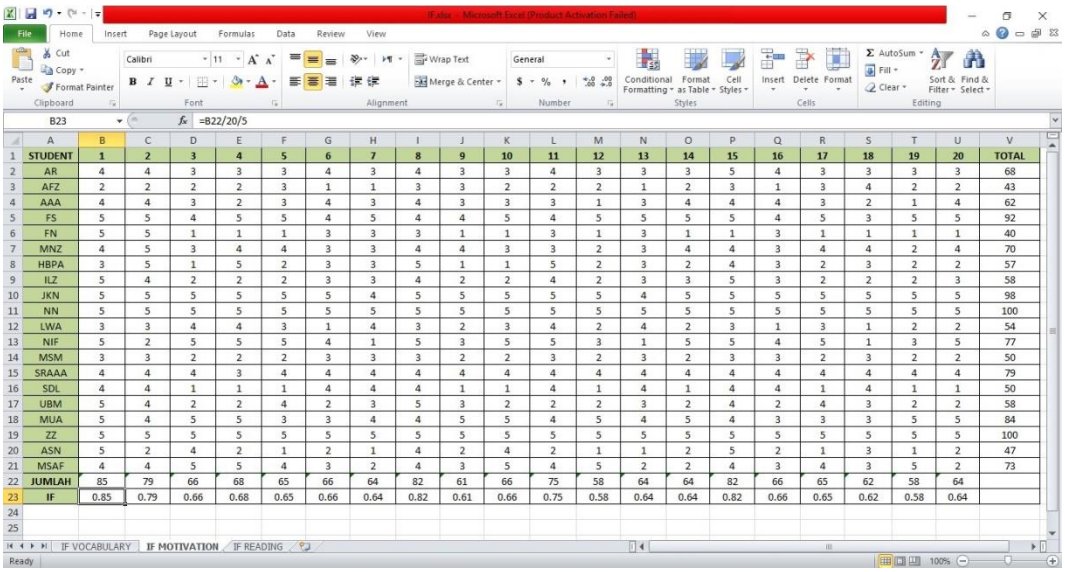
Table 3.11

The Item Facility of Vocabulary Mastery

Number 1	0,9 – Easy
Number 2	0,2 – Difficult
Number 3	0,9 – Easy
Number 4	0,4 – Difficult
Number 5	0,25 – Difficult
Number 6	0,25 – Difficult
Number 7	0,45 – Moderate
Number 8	0,45 – Moderate
Number 9	0,4 – Moderate
Number 10	0,45 – Moderate
Number 11	0,85 – Easy
Number 12	0,55 – Moderate

Number 13	0,65 – Moderate
Number 14	0,6 – Moderate
Number 15	0,9 – Easy
Number 16	0,75 – Easy
Number 17	0,55 – Moderate
Number 18	0,65 – Moderate
Number 19	0,85 – Easy
Number 20	0,6 – Moderate

The data of item facility of learning motivation are in this below:



STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
AR	4	4	3	3	3	4	3	4	3	3	4	3	3	3	5	4	3	3	3	3	68
AFZ	2	2	2	2	3	1	1	3	3	2	2	2	1	2	3	1	3	4	2	2	43
AAA	4	4	3	2	3	4	3	4	3	3	3	1	3	4	4	4	3	2	1	4	62
FS	5	5	4	5	5	4	5	4	4	5	4	5	5	5	5	4	5	3	5	5	92
FN	5	5	1	1	1	3	3	3	1	1	3	1	3	1	1	3	1	1	1	1	40
MNZ	4	5	3	4	4	3	3	4	4	3	3	2	3	4	4	3	4	4	2	4	70
HBPA	3	5	1	5	2	3	3	5	1	1	5	2	3	2	4	3	2	3	2	2	57
ILZ	5	4	2	2	2	3	3	4	2	2	4	2	3	3	5	3	2	2	2	3	58
JKN	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	98
NN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
LWA	3	3	4	4	3	1	4	3	2	3	4	2	4	2	3	1	3	1	2	2	54
NIF	5	2	5	5	5	4	1	5	3	5	5	3	1	5	5	4	5	1	3	5	77
MSM	3	3	2	2	2	3	3	3	2	2	3	2	3	2	3	3	2	3	2	2	50
SRAAA	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	79
SDL	4	4	1	1	1	4	4	4	1	1	4	1	4	1	4	4	1	4	1	1	50
UBM	5	4	2	2	4	2	3	5	3	2	2	2	3	2	4	2	4	3	2	2	58
MUA	5	4	5	5	3	3	4	4	5	5	4	5	4	5	4	3	3	3	5	5	84
ZZ	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
ASN	5	2	4	2	1	2	1	4	2	4	2	1	1	2	5	2	1	3	1	2	47
MSAF	4	4	5	5	4	3	2	4	3	5	4	5	2	2	4	3	4	3	5	2	73
JUMLAH	85	79	66	68	65	66	64	82	61	66	75	58	64	64	82	66	65	62	58	64	
IF	0.85	0.79	0.66	0.68	0.65	0.66	0.64	0.82	0.61	0.66	0.75	0.58	0.64	0.64	0.82	0.66	0.65	0.62	0.58	0.64	

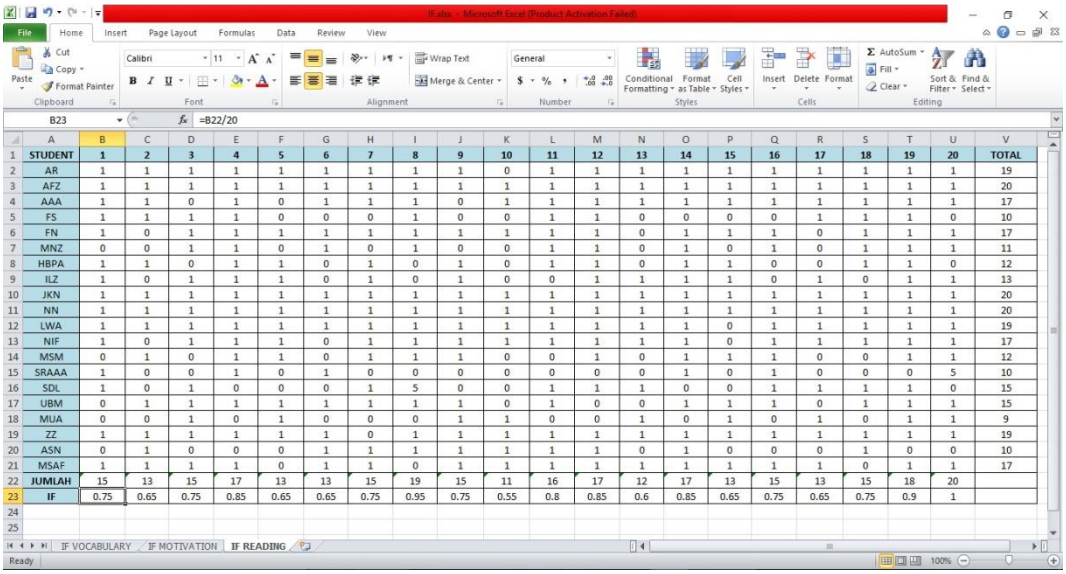
Table 3.12

The Item Facility of Learning Motivation

Number 1	0,85 – Easy
Number 2	0,79 – Easy
Number 3	0,66 – Moderate
Number 4	0,68 – Moderate
Number 5	0,65 – Moderate
Number 6	0,66 – Moderate
Number 7	0,64 – Moderate
Number 8	0,82 – Easy
Number 9	0,61 – Moderate
Number 10	0,66 – Moderate
Number 11	0,75 – Easy
Number 12	0,58 – Moderate
Number 13	0,64 – Moderate
Number 14	0,64 – Moderate
Number 15	0,82 – Easy

Number 16	0,66 – Moderate
Number 17	0,65 – Moderate
Number 18	0,62 – Moderate
Number 19	0,58 – Moderate
Number 20	0,64 – Moderate

The data of item facility of reading comprehension are in this below:



STUDENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
AR	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	19
AFZ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
AAA	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	17
FS	1	1	1	1	0	0	0	1	0	0	1	1	0	0	0	0	1	1	1	0	10
FN	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	17
MNZ	0	0	1	1	0	1	0	1	0	0	1	1	0	1	0	1	0	1	1	1	11
HBPA	1	1	0	1	1	0	1	0	1	0	1	1	0	1	1	0	0	1	1	0	12
ILZ	1	0	1	1	1	0	1	0	1	0	0	1	1	1	1	0	1	0	1	1	13
JKN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
NN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
LWA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	19
NIF	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	17
MSM	0	1	0	1	1	0	1	1	1	0	0	1	0	1	1	1	0	0	1	1	12
SRAAA	1	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	5	10
SDL	1	0	1	0	0	0	1	5	0	0	1	1	1	0	0	1	1	1	1	0	15
UBM	0	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	15
MUA	0	0	1	0	1	0	0	0	1	1	0	0	1	0	1	0	1	0	1	1	9
ZZ	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	19
ASN	0	1	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	0	0	10
MSAF	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	17
JUMLAH	15	13	15	17	13	13	15	19	15	11	16	17	12	17	13	15	13	15	18	20	
IF	0.75	0.65	0.75	0.85	0.65	0.65	0.75	0.95	0.75	0.55	0.8	0.85	0.6	0.85	0.65	0.75	0.65	0.75	0.9	1	

Table 3.13

The Item Facility of Reading Comprehension

Number 1	0,75 – Easy
Number 2	0,65 – Moderate
Number 3	0,75 – Easy
Number 4	0,85 – Easy
Number 5	0,65 – Moderate
Number 6	0,65 – Moderate
Number 7	0,75 – Easy
Number 8	0,95 – Easy
Number 9	0,75 – Easy
Number 10	0,55 – Moderate
Number 11	0,8 – Easy
Number 12	0,85 – Easy
Number 13	0,6 – Moderate
Number 14	0,85 – Easy
Number 15	0,65 – Moderate
Number 16	0,75 – Easy
Number 17	0,65 – Moderate
Number 18	0,75 – Easy
Number 19	0,9 – Moderate

Number 20	1 – Very easy

e. Spearman Rho

Donald et al (2006: 354-355) Spearman rho is taken the similar way like the Pearson r. Like Pearson product moment coefficient of correlation, it grades from −1.00 to +1.00. While each individual has similar grade equally variables, rho correlation will be +1.00, and once their grades on one variable are exactly the opposite their grades on the other variable, rho desire be −1.00. When there is no relationship between the grades, the grade correlation coefficient will be 0.

To be competent to deliver a clarification of the criteria of the correlation coefficient, according to Sugiyono (2017: 231) there are several criteria for delivering clarification of correlation coefficients as follows:

Table 3.14

Criteria of the Correlation Coefficients

Value	Explanation
0,00 – 0,199	Very low
0,20 – 0,399	Low
0,40 – 0,599	Moderate
0,60-0,799	Strong
0,80 – 1,000	Very strong

Sugiyono: 231

H. Hypothesis Testing

In testing the hypothesis, researcher applied Spearman Rho within *SPSS 23.0* for windows to determine whether there is a positive correlation in hypothesis. If significant F Change < 0.05 is significant, it could be concluded H_0 is rejected and H_1 is accepted. Not only to test there is a positive correlation or not, but also to know the criteria of the correlation are given.